



IDIH

INTERNATIONAL COLLABORATION
DIGITAL TRANSFORMATION
HEALTHY AGEING

D4.5

Guidebook for care providers and users

APRE – AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA
(VERSION 2.0)



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Abstract

This Guidebook aims to introduce - to care providers and users associations in the EU and in 5 Strategic Partner Countries (Canada, China, Japan, South Korea, and USA) - the funding schemes that are supporting international cooperation in Digital Health and AHA (Active and Healthy Ageing), for the time being and for the next future. Starting from the background findings of [D2.4](#) and D2.1, the *Guidebook for care providers and users* focuses on international cooperation opportunities (Section: Funding Programmes) by highlighting contents that are potentially of interest for these stakeholders (easily identified through *icons*). The content is enriched by the information concerning participation and success rates in funding programmes (Section: Facts & Figures) and testimonies of organizations who experienced international cooperation (Section: Stories). Boxes and graphic highlights help to better orient care providers and users and bring to their attention some key-aspects that may allow them to find the most suitable opportunity for international cooperation. This technical deliverable has been updated with the annexes 1 and 2 (date of update: 29/09/2021) on the key informative aspects concerning relevant opportunities for international cooperation between the EU and the IDIH Strategic Countries.

Keywords

International Cooperation, Digital Health, Active and Healthy Ageing, Funding Agencies, Funding Programmes, Policy, Care Providers, Users associations

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Abbreviations and Acronyms

Abbreviation, Acronym	Description
AAI	Active Ageing Index
AAL	Active and Assisted Living
AHA	Active and Healthy Ageing
AI	Aging Institute (CIHR)
AI	Artificial Intelligence
AMED	Japan Agency for Medical Research and Development
APRE	Agenzia per la Promozione della Ricerca Europea (project partner)
ATC	Athens Technology Center S.A. (project partner)
Catalyst	Catalyst @Health 2.0 (project partner)
CBTC	China-Belgium Science and Technology Park
CEF	Connecting Europe Facility
CF	Cohesion Fund



Abbreviation, Acronym	Description
CHAFAEA	Consumers, Health, Agriculture and Food Executive Agency
CIHR	Canadian Institutes of Health Research (project partner)
COST	Cooperation in Science and Technology
CRCC	Canada Research Coordinating Committee (Canada)
CSA	Coordination and Support Action
CSO	Civil Society Organization
DG	Directorate-General of the European Commission
DGMIF	Daegu-Gyeongbuk Medical Innovation Foundation
DNA	Data, Network and AI
DSM	Digital Single Market
EaSI	Employment and Social Innovation
ECDC	European Centre for Disease Prevention and Control
ECHA	European Chemicals Agency
EEN	Enterprises Europe Network
EEPC	Eastern European Partner Countries
EFP	European Framework Programme
EFSA	European Food Safety Authority
EG	Expert Group
EIC	European Innovation Council
EIS	European Innovation Scoreboard
EIT	European Institute of Innovation and Technology
EMA	European Medicines Agency
EMR	Electronic Medical Records
ERA	European Research Area
ERDF	European Regional Development Fund
ERNs	European Reference Networks
ESF+	European Social Fund +
ETRI	Electronics and Telecommunications Research Institute
EU	European Union
FEAD	Fund for Aid to the Most Deprived
FP	Framework Programme
FP9	9th (EU) Framework Programme
FTA	Free Trade Agreement



Abbreviation, Acronym	Description
GAC	GAC Group (project partner)
GCC	Global Commercialization Center
GDHP	Global Digital Health Partnership
GDP	Gross Domestic Product
GERD	Gross Domestic Expenditure in R&D
GSBC	Global SMEs Business Council (project partner)
H2020	Horizon 2020
IA	Innovation Action
ICT	Information and communications technology
IDIH	International Digital Health Cooperation for Preventive, Integrated, Independent and Inclusive Living (IDIH project)
IPR	Intellectual Property Rights
IRAP	Industrial Research Assistance Program
JAICA	Japan International Cooperation Agency
JRC	Join Research Centre
JSPS	Japan Society for the Promotion of Science
JST	Japan Science and Technology Agency
JSTCC	Joint Science and Technology Cooperation Committee
KCDC	Centres for Disease Control and Prevention
KET	Key Enabling Technology
KIAT	Korea Institute for Advanced Technology
KOITA	Korea Industrial Technology Association
KSO	Key Strategic Orientations (Horizon Europe)
LTC	Long-Term Care
MAFF	Ministry of Agriculture, Forestry and Fisheries
METI	Ministry of Economy, Trade and Industry
MEXT	Ministry of Education, Culture, Sports, Science And Technology
MFF	(EU) Multiannual Financial Framework
MGA	Model Grant Agreement
MHLW	Ministry of Health, Labour And Welfare
MIST	Ministry of Science and Technology (South Korea)
MOHW	Ministry of Health And Welfare
MOST	Ministry of Science and Technology



Abbreviation, Acronym	Description
MOTIE	Ministry of Trade, Industry and Energy (Korea)
MoU	Memorandum of Understanding
MSIT	Ministry of Science and ICT (Korea)
NCP	National Contact Point
NGEU	Next Generation EU
NIA	National Institute on Aging
NIH	National Institute of Health
NRC	National Research Council Canada
NRF	National Research Foundation of Korea
NSF	National Natural Science Foundation of China
OECD	Organisation for Economic Co-operation and Development
PHAC	Public Health Agency of Canada
PIC	Participant Identification Code
QoL	Quality of Life
R&D	Research & Development
R&I	Research and Innovation
RDI	Research, Development and Innovation
RIA	Research and Innovation Action
S&T	Science & Technology
S2i	Steinbeis 2i GmbH (project partner)
Sawarabi	Sawarabi Group (project partner)
SC1	Societal Challenge 1
SDGs	Sustainable Development Goals
SMEs	Small and Medium Enterprises
SPS	School of Pharmaceutical Science Tsinghua University (project partner)
SRIA	Strategic Research and Innovation Agenda
SSHRC	Social Sciences and Humanities Research Council (Canada)
STI	Science , Technology and Innovation
TRL	Technology Readiness Level
UN	United Nations
WHA	World Health Assembly (WHO)
WHO	World Health Organization
WP	Work Programme



Abbreviation, Acronym	Description
YEI	Youth Employment Initiative

About this Guidebook and how to consult it

This Guidebook is an information product resulted from the activities of the European project [IDIH - International Digital Health Cooperation for Preventive, Integrated, Independent and Inclusive Living](#). IDIH pursues to foster collaboration in the field of digital health for Active and Healthy Ageing (AHA) between the European Union and five Strategic Partner Countries (USA, Canada, China, Japan and South Korea).

IDIH - funded under the European Union Horizon 2020 Research and Innovation Programme – focuses on four key areas that embrace common priorities of all countries/regions involved: Preventive care, Integrated care, Independent and connected living, Inclusive living.

This Guidebook aims to **introduce - to care providers and users associations in the EU and in 5 Strategic Partner Countries (Canada, China, Japan, South Korea, and USA) - the funding schemes that are supporting international cooperation in Digital Health and AHA** (Active and Healthy Ageing), for the time being and for the next future.

WHO is this Guidebook for?



Care Providers | Private or public organizations that play a central and critical role in ensuring access and quality health care for the aged population, by providing services that prevent diseases and deliver in-hospital/residential/home care services and assistance to individuals and/or families.

Users associations | Organizations that represent the users of the digital solutions for AHA, namely the elderly (and/or their families) and the patients suffering diseases related to Ageing.



From the EU and 5 Strategic Countries | Care providers and users associations that may benefit from this Guidebook are based in the EU and in the 5 Strategic Partner Countries of the IDIH project (Canada, China, Japan, South Korea, and USA).

WHY should you be interested?



Care Providers | The opportunities offered by the collaborative projects that can be funded under the Programmes here presented may allow Care Providers to share good (care) practices at international level and replicate/adapt successful care models at national level. Moreover, by building international cooperation partnerships, Care Providers may widen their networking and attract new strategic stakeholders (namely policy makers, reserachers, innovators and users), which may enable them to further improve their services and create fruitful synergies .

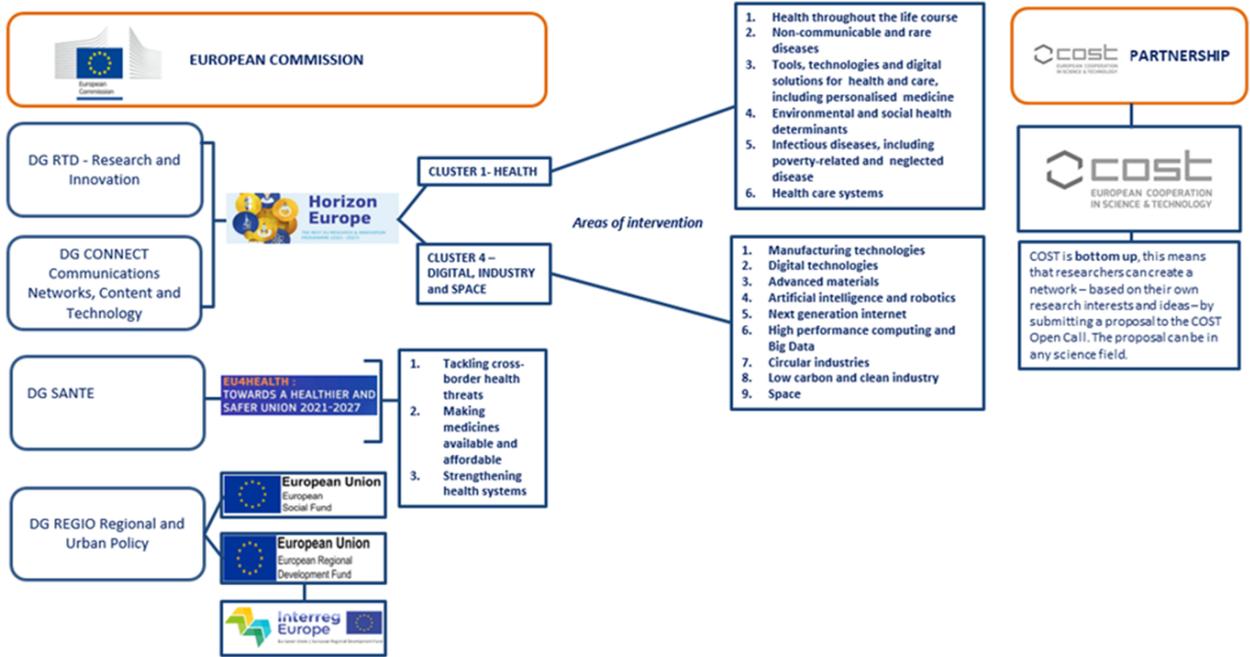
Users associations | As representatives of the needs and expectations of users and patients in the field of Digital Health for AHA, Users associations will benefit from the information here provided discovering new opportunities to cooperate at an international level with other or similar organizations or with researchers and innovators operating in countries that are consideres as strategic for the enhancement of digital innovation for AHA. This could enable them to share good practices at international level and replicate/adapt successful operational models in their respective country/region. Moreover, by building international cooperation partnerships and widening their networking, Users associations may further enlarge their membership and attract new strategic stakeholders (namely policy makers, reserachers, innovators and care providers), which may enable them to better advocate for the interests of the elderly and their families, as well as to create fruitful synergies .



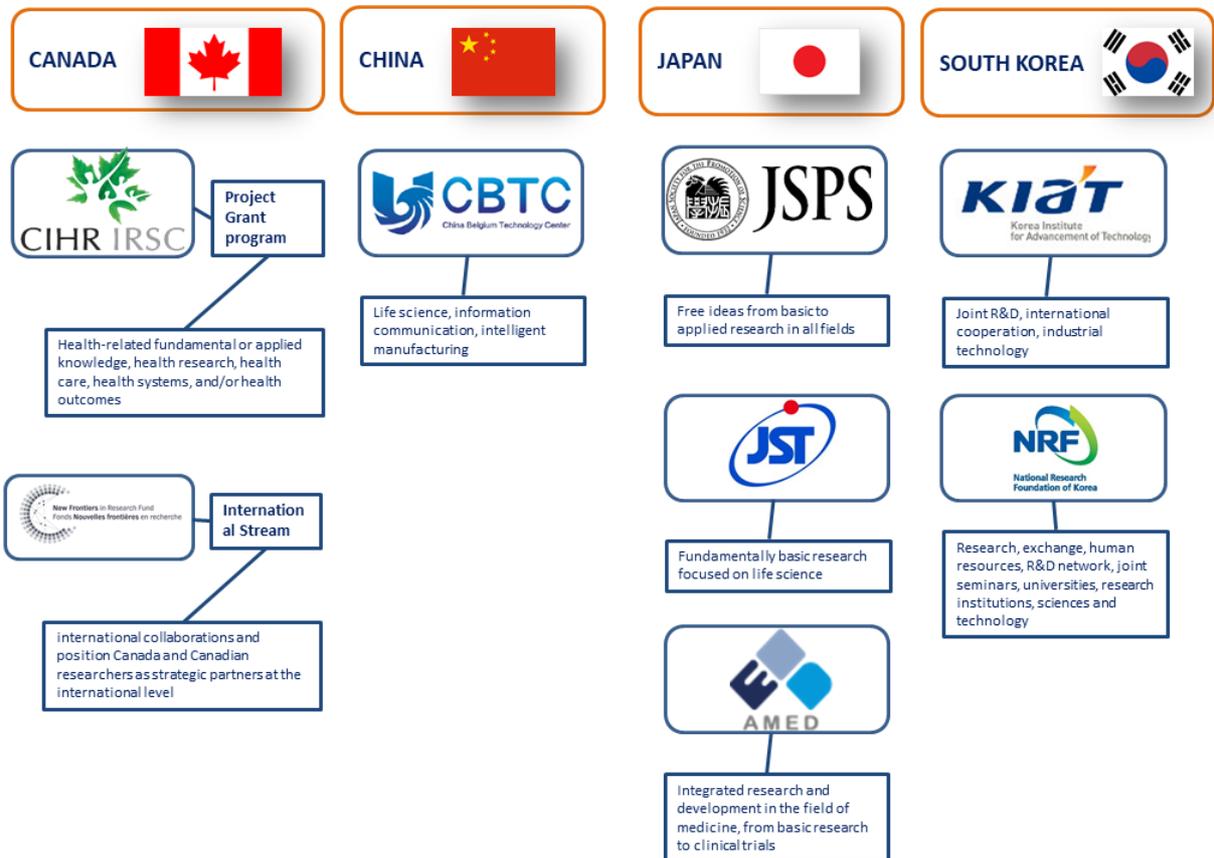
WHAT you will find in this Guidebook

As part of the IDIH project, the Guidebook at hand introduces to Care Providers and Users associations coming from the EU and the IDIH Strategic Countries valuable resources and potential opportunities for international cooperation that are currently offered by the programmes and policies in the fields of Digital Health and AHA in the respective countries/regions.

For what concerns the **Funding Agencies and current Programs that deal with Digital Health for AHA in Europe**, and may represent untapped opportunities for international cooperation for Care Providers and Users associations from the 5 IDIH Strategic Countries, we included a non-comprehensive but most relevant list of schemes that will be staged in this Guidebook. At EU level, these include primarily the following:



At the transnational level, we focus in the framework of the IDIH project those **Funding Agencies and current Programs that deal with Digital Health for AHA in the 5 IDIH Strategic Countries**. These are visualised below and will be tackled each including highlighted opportunities for international cooperation, specifically where possible special attention for European Care Providers and Users Associations.



HOW to use this Guidebook

The information included in this Guidebook is organized in three sections.

While the Section **Funding Programmes** present content that is of interest to a larger group of stakeholders, made easily identifiable through **icons and colour codes**, the introductory section **Facts & Figures** provides relevant data on participation and success rates in R&I programmes (**Section: Facts & Figures**) and testimonies of organizations who experienced international cooperation (**Section: Stories**). Boxes and graphic highlights help to better orient care providers and users and bring to their attention some key-aspects that may allow them to find the most suitable opportunity for international cooperation.

• Users Icones

Icons identify the users of this Guidebook and highlight contents potentially of interest for them



Care Providers

Users associations

• Contents sections

Contents Sections identify different contents visually, in a coordinated and constant manner (by function)

Facts & Figures

- Statistics on participation, success rates, etc.

Stories

- Success Stories: testimonies of people who made it, by accessing funding, or experiencing international cooperation and achieving significant goals!

Funding

- Information on Funding Programmes open to the international cooperation in the field of Digital Health for AHA

[useful] DEFINITIONS



What is Digital Health? | The term digital health is rooted in eHealth, which is defined as “the use of information and communications technology in support of health and health-related fields”. Mobile health (mHealth) is a subset of eHealth and is defined as “the use of mobile wireless technologies for health”. More recently, the term digital health was introduced as “**a broad umbrella term encompassing eHealth (which includes mHealth), as well as emerging areas, such as the use of advanced computing sciences in ‘big data’, genomics and artificial intelligence**” [Source: WHO]

What is Healthy Ageing? | Healthy Ageing is defined by the World report on ageing and health as the **process of developing and maintaining the functional ability that enables well-being in older age**. [Source: WHO]

What is AHA? | The broad concept of AHA was proposed by the WHO as the **process of optimizing opportunities for health to enhance quality of life as people age**. It applies to individuals and population groups. A universal (and operational) definition of AHA is still not available¹.

¹ See Operational definition of active and Healthy Ageing: a conceptual framework: https://ec.europa.eu/eip/ageing/sites/eipaha/files/results_attachments/bousquet.pdf

What is AAI? | **Active Ageing Index** is a tool to measure the untapped potential of older people for active and healthy ageing across countries. It measures the level to which older people live independent lives, participate in paid employment and social activities, and their capacity to age actively. The AAI is a product of a joint project undertaken in 2012 by the UNECE Population Unit together with the European Commission Directorate General for Employment, Social Affairs and Inclusion and the European Centre for Social Welfare Policy and Research in Vienna. Click [here](#) to access the **Guidelines for Active Ageing Index (AAI)**.

E-health glossary:

- **Patient summaries**
Patient summaries collect main essential health data of each patient. They will be accessible to health professionals in the EU, facilitating tailored care for EU citizens even when accessing services in other EU countries.
- **e-prescriptions and e-dispensations**
Patients abroad can receive similar medication to that of their home countries through e-prescriptions and e-dispensations.
e-prescribing permits the electronic transmission of a prescription to a pharmacy while e-dispensing refers to the electronic retrieval of a prescription and supply of the medicine to the patient.
- **Electronic Health Records (EHRs)**
EHRs refer to the comprehensive medical records of an individual that are accessible in electronic form.

Figure 1: E-health glossary of the European Commission: https://ec.europa.eu/health/ehealth/home_en

International cooperation opportunities for Care Providers and Users associations

In times of Covid-19 pandemic, research and innovation are becoming more and more crucial. COVID-19 has shown the vulnerability of our societies, especially impacting on the economy and on the health and care systems, that are now called to become more *resilient*. Collaboration at research and policy level has increased as never happened in the last 50 years, working with and for the citizens, who progressively changed their perception towards science in society and now seem to trust researchers more.

Many initiatives have been put in place by the European Commission to facilitate research activities through dedicated funding opportunities, the sharing of research data in the framework of the “[ERAvs Corona Action Plan](#)”, and a huge Pan-EU Hackaton to mobilize European Innovators and civil society.

We are currently witnessing an extraordinary coordination effect, and a fast reaction from the Member States of the EU, that was very much necessary at the time of such an unexpected pandemic, and now is needed again to recover and build a better future around a *well performing* R&I landscape, based on international cooperation and, therefore, capable of facing global challenges.

Indeed, in order to overcome this global crisis and its social and economic impact on society, R&I needs to be the very best fertile ground for cooperation at international level.

However, **interdisciplinary** and **intersectoriality** have become even more important aspects in the development of R&I projects, which now need more effective strategies for the engagement of the users and the stakeholders, in order to maximise impact and respond to complex challenges through integrated and systemic approaches.

That's why your role as Care Providers and Users associations - *at the forefront for the wellbeing and the protection of health of the elderly and their families* – is crucial in R&I projects and may be enhanced through the participation in international cooperation projects, in response to global challenges!



Moreover, international cooperation opportunities - as part of funded projects - may also be considered in the light of the following trends that currently affect the long-term care - LTC services. In this perspective, participations in international projects of Care Providers may contribute to cope with such trends.

1. Low job quality leads workers to leave the elderly care sector²

LTC workers are often dissatisfied with pay, working conditions and career prospects, adding to the physical and mental stress of the job. That, in turn, leads to low recruitment and retention and an overall shortage of workers in elderly care.

LTC workers earn much less than those working at hospitals in similar occupations. The median wage for LTC workers across European countries was EUR 9 per hour, compared to EUR 14 per hour for hospital workers in broadly similar occupations. There are also more career promotion prospects in hospitals than in the LTC sector.

Non-standard employment, including part-time and temporary work, is common in the sector. Almost half (45%) of LTC workers in OECD countries work part-time, over twice the share in the economy as a whole. Temporary employment is frequent: almost one in five LTC workers have a temporary contract, compared to just over one in ten in hospitals. Furthermore, jobs are physically and mentally very demanding. For example, half of LTC workers do shift work, which is associated with health risks such as anxiety, burnout and depression.

2. Insufficient training and skills can pose risks to the quality of care³

Personal care workers and those providing routine personal care who are not qualified or certified as nurses, account for 70% of the LTC workforce across the OECD. The vast majority of LTC workers are middle-aged women. One in five are foreign-born.

*In more than two-thirds of OECD countries, their tasks go well beyond help with basic activities, such as washing, lifting out of bed, helping with feeding. **They are often involved in monitoring health, participating in the implementation of care plans and maintaining health records.** However, less than half of the surveyed countries require that personal care workers pass or hold a licence or certification.*

² Extract from OECD (2020), Who Cares? Attracting and Retaining Care Workers for the Elderly, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/92c0ef68-en>.

³ Extract from OECD (2020), Who Cares? Attracting and Retaining Care Workers for the Elderly, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/92c0ef68-en>.

Low qualifications relative to the tasks required can raise the risk of substandard care, particularly to elderly people with more complex care needs.

In order to maintain and extend its world leadership, the EU is now focusing on international cooperation and partnerships with third countries and other international partners, in a way that could enable Europe to tap the best expertise and know-how available worldwide, to leverage a critical scale of resources and, finally, to tackle global societal challenges.

This perspective is currently at the base of the revision of the [EU strategy for the international cooperation in R&I](#) of 2012⁴, that also guides the discussion of EU institutions for the adoption of the next framework programme for research and innovation “Horizon Europe”, highlighting the need to focus on strategic sectors and partner countries, with which the EU intends to cooperate more, while maintaining an *open* approach to the rest of the world.

In her speech on the State of the Union of September 16th 2020 at the European Parliament Plenary, the President of the European Commission Ursula von der Leyen stated how COVID-19 “has simultaneously shown both the fragility of the global system and the importance of cooperation to tackle collective challenges”. Thanks to the EU unique social market economy, the President of the EC now calls for a “human economy”, capable of protecting citizens against the great risks of life, offering stability and an exit-strategy to absorb shock by the means of innovation, growth and fair competition. These are the principles laying at the foundations of the Recovery Plan for Europe that will leverage on the challenges that the EU is now facing, actually conceived as powerful enablers of the progress of the Union. **Starting from this ambition, the EU is now at work for building a stronger European “Health” Union in which to support the EU capacity and readiness to respond to cross-border health threats and emergencies**⁵.

Health systems | They are a key asset of the EU social systems, accounting for 24 million employees in the health and social work sector in 2017. It is a main priority of Member States to render health systems safe and secure, accessible for all, integrated, cost-effective, resilient, sustainable and trusted with timely and relevant services, as well as to reduce inequalities, including by unleashing the potential of data-driven and digital innovation for better health and person-centred care building on open and safe European data infrastructures. New opportunities such as 5G deployment, the concept of ‘digital twins’ and the Internet of Things will advance the digital transformation of health and care⁶.

Major and global new markets in health care, media, entertainment, communication and retail, quickly developed in the last decades, based on breakthrough innovations in ICT, biotech, green-tech, and internet. These market-creating innovations affected the EU economy through the scale-up of fast growing and often new companies and business models.

Digitisation | it is a major driver in the EU that evolves at a rapid pace across all sectors.

⁴ To see the Strategy Implementation Reports, visit: <https://ec.europa.eu/research/iscp/index.cfm?pg=strategy>

⁵ The President of the EC has proposed to establish a new agency for biomedical advanced research and development based on the model of the US [BARDA](#).

⁶ Extract from the *Proposal for a Decision of the Council on establishing the specific programme implementing Horizon Europe - the Framework Programme for Research and Innovation*.



Investing, producing and using digital technologies provides a major boost to EU economic growth, amounting to an increase of 30% between 2001 and 2011 alone. In this context, the role of SMEs remains fundamental in the EU, both in terms of growth and jobs⁷.

ICT in the EU | In the EU, the R&D intensity of the ICT sector was the highest in Finland, Austria and Sweden. *Innovation leaders*, namely Finland, Sweden and Denmark, and *strong innovators*, such as Austria and France, rank highest in terms of their ICT industries' R&D intensity in 2018. At the lower end of the spectrum are Latvia, Luxembourg, Croatia, Lithuania and Romania, but the digital divide between the most-advanced and least-digitally advanced nations seems to be closing. Norway stands out as an H2020 associated country with a very high R&D intensity in the ICT sector (for which data are available), close to that of Finland. Source: *Science, Research and Innovation Performance of the EU 2020. A fair, green and digital Europe*. European Commission, DG RTD, 2020.]

Research and innovation remain the key drivers of sustainable and inclusive growth and technological and industrial competitiveness, capable of turning the challenges into new business opportunities and into rapid benefits for society.

⁷ Extract from the *Proposal for a Decision of the Council on establishing the specific programme implementing Horizon Europe - the Framework Programme for Research and Innovation*.

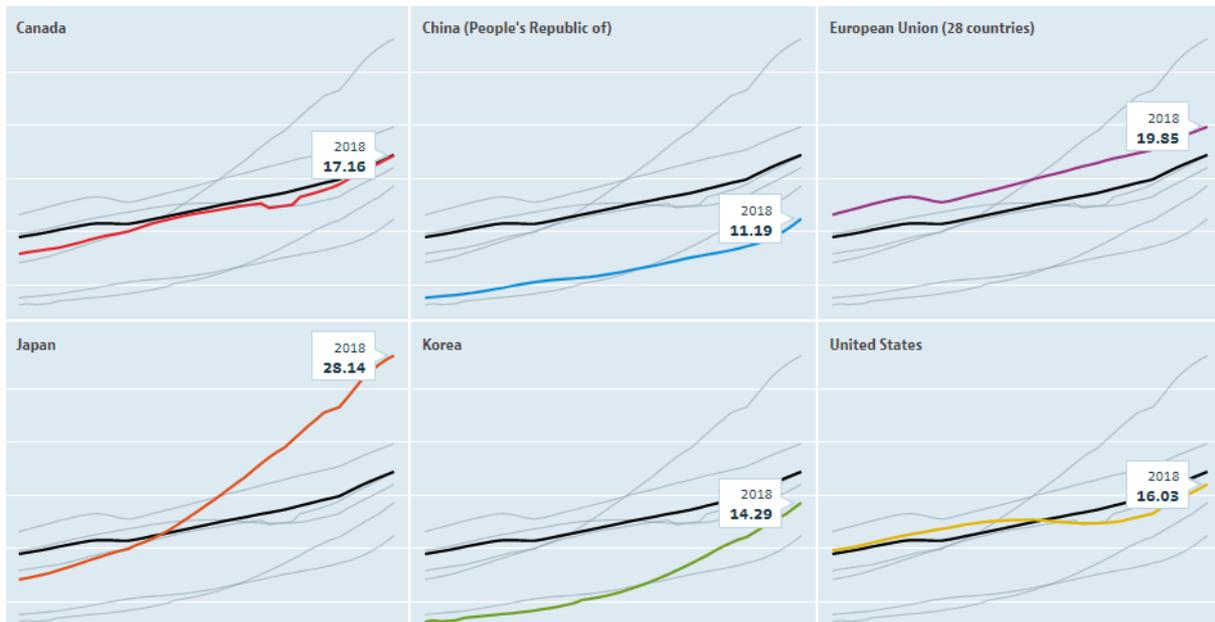
FACTS & FIGURES

Facts & Figures

AGEING AND CARE SERVICES

The elderly population in the EU and in the IDIH Strategic Countries ⁸

[Source: OECD (2020)] The elderly population is defined as people aged 65 and over. The share of the dependent population is calculated as total elderly and youth population expressed as a ratio of the total population. The elderly dependency rate is defined as the ratio between the elderly population and the working age (15-64 years) population. The comparability of elderly population data is affected by differences, both within and across countries, in how regions and the geography of rural and urban communities, are defined. Elderly people tend to be concentrated in few areas within each country, which means that a small number of regions will have to face a number of specific social and economic challenges due to population ageing. These demographic trends have a number of implications for government and private spending on pensions, health care, and education and, more generally, for economic growth and welfare.

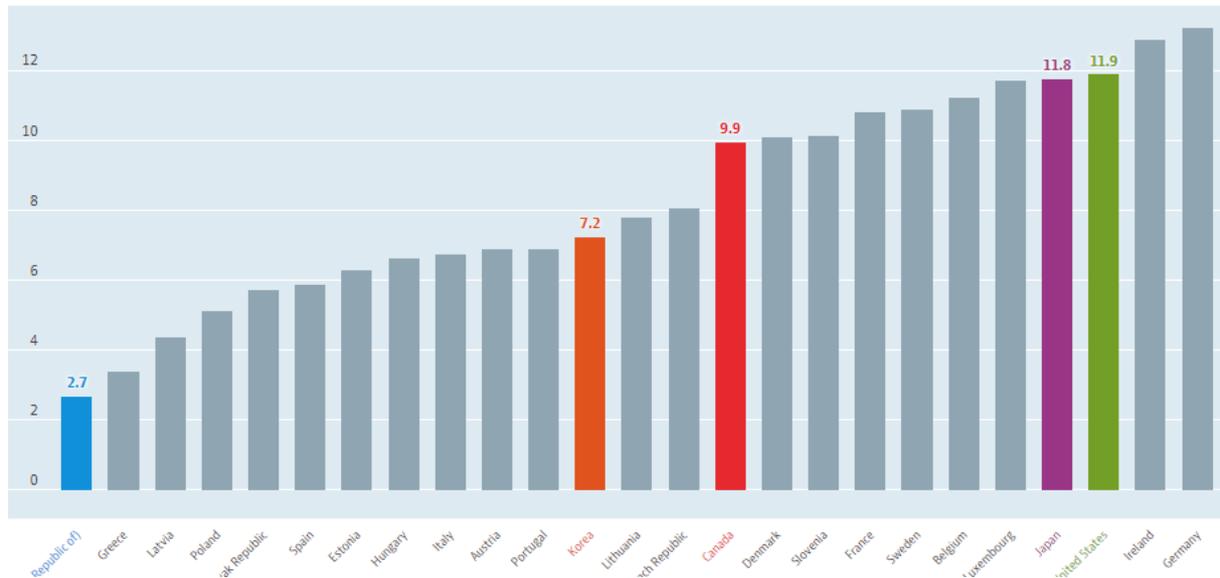


This indicator is measured as a *percentage of population*, and shows the primacy of Japan in this field with the 28,14 % of population aged 65 and over, followed by the EU27 (19,85 % of population). The average % of population in these countries and regions is 17,7 % . The youngest population among these is represented by China with the 11, 19 % of people aged 65 and over.

⁸ This part is extracted from OECD (2020), Elderly population (indicator). doi: 10.1787/8d805ea1-en

Nurses in the IDIH Strategic Countries⁹

[Source: OECD (2020)] Nurses are defined as all the "practising" nurses providing direct health services to patients, including self-employed nurses. However, for some countries (...), due to lack of comparable data, the figures correspond to "professionally active" nurses, including nurses working in the health sector as managers, educators, researchers, etc. [or] (...) only nurses working in hospitals. Midwives and nursing aides (who are not recognised as nurses) are normally excluded although some countries include midwives as they are considered specialist nurses.

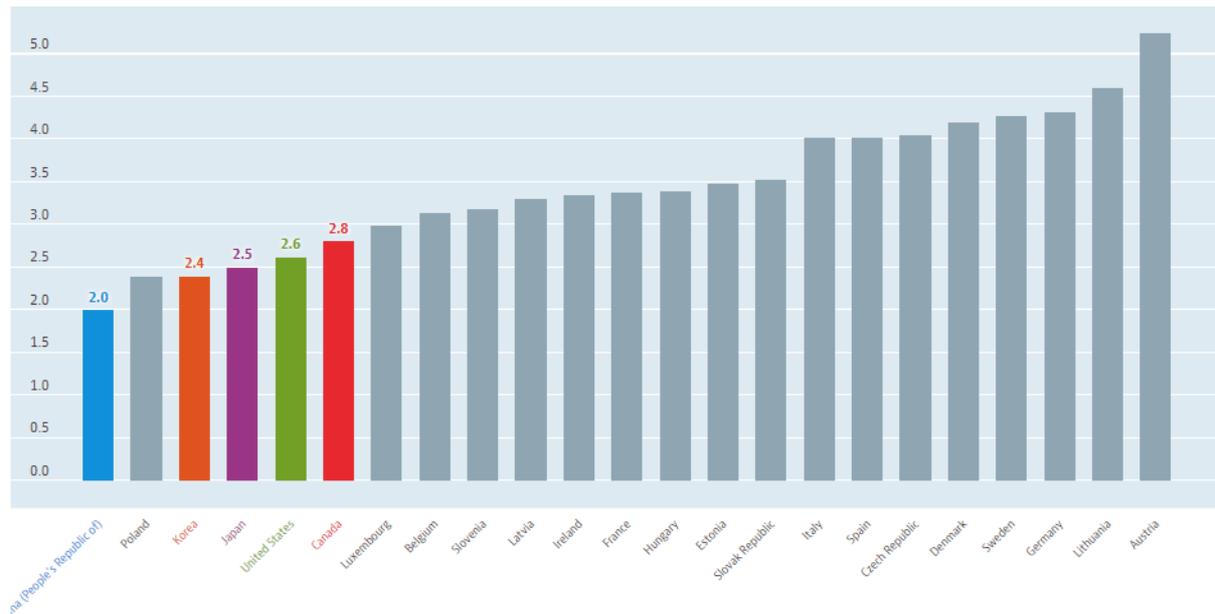


This indicator is measured per 1 000 inhabitants and doesn't highlight EU27 positioning since it is build on a national base. USA and Japan seem to show a lead a higher level of care by leading the ranking with about 11 nurses per 1000 inhabitants. The average of nurses reported among these 5 countries/regions is 8,7 and demonstrate how Korea and China remain below this average, with China at the lowest place in ranking with 2,7 nurses per 1000 inhabitants.

⁹ This part is extracted from OECD (2020), Nurses (indicator). doi: 10.1787/283e64de-en

Doctors in the IDIH Strategic Countries¹⁰

[Source: OECD (2020)] Doctors are defined as "practising" doctors providing direct care to patients. However for some countries [among which Canada] (...) due to lack of comparable data, the figures correspond to "professionally active" doctors, including doctors working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors). Doctors are usually generalists who assume responsibility for the provision of continuing care to individuals and families, or specialists such as paediatricians, obstetricians/gynaecologists, psychiatrists, medical specialists and surgical specialists.



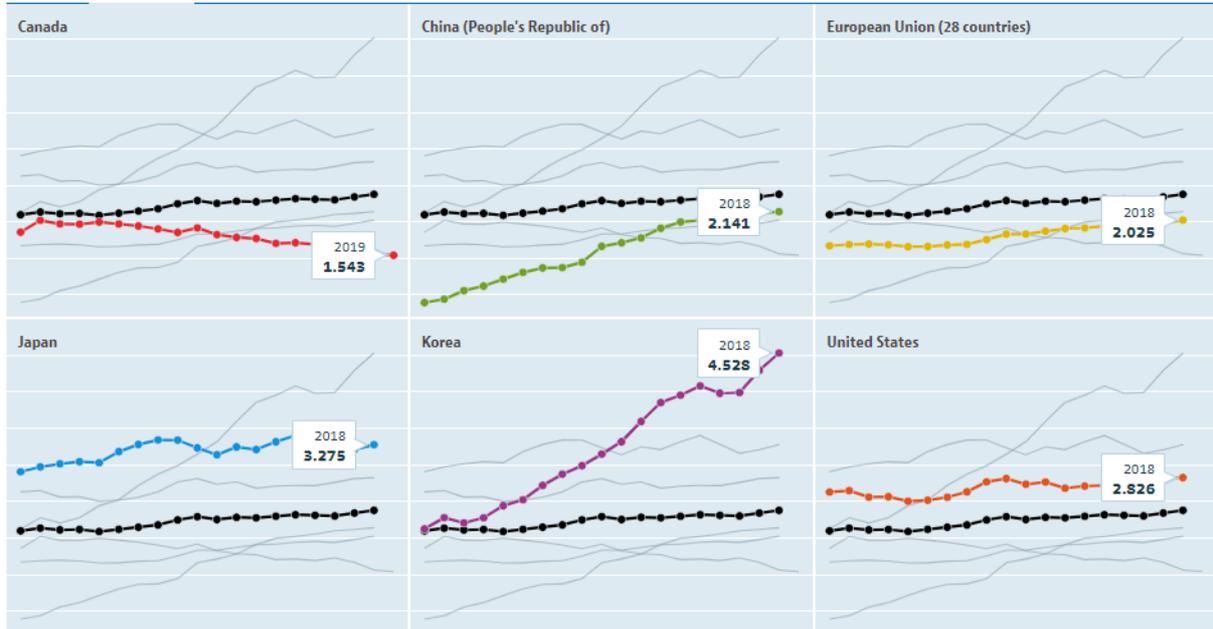
This indicator is measured per 1 000 inhabitants and doesn't highlight EU27 positioning since it is build on a national base. Canada leads the ranking with 2,8 doctors per 1000 inhabitants. The average of doctors reported among these 5 countries/regions is 2,46 and demonstrate how Korea and China remain below this average, with China at the lowest place in ranking with 2 doctors per 1000 inhabitants.

¹⁰ This part is extracted from OECD (2020), Doctors (indicator). doi: 10.1787/4355e1ec-en

RESEARCH AND INNOVATION

Gross domestic spending on R&D in the EU and in the IDIH Strategic Countries¹¹

[Source: OECD (2020)] Gross domestic spending on R&D is defined as the total expenditure (current and capital) on R&D carried out by all resident companies, research institutes, university and government laboratories, etc., in a country. **It includes R&D funded from abroad, but excludes domestic funds for R&D performed outside the domestic economy.**

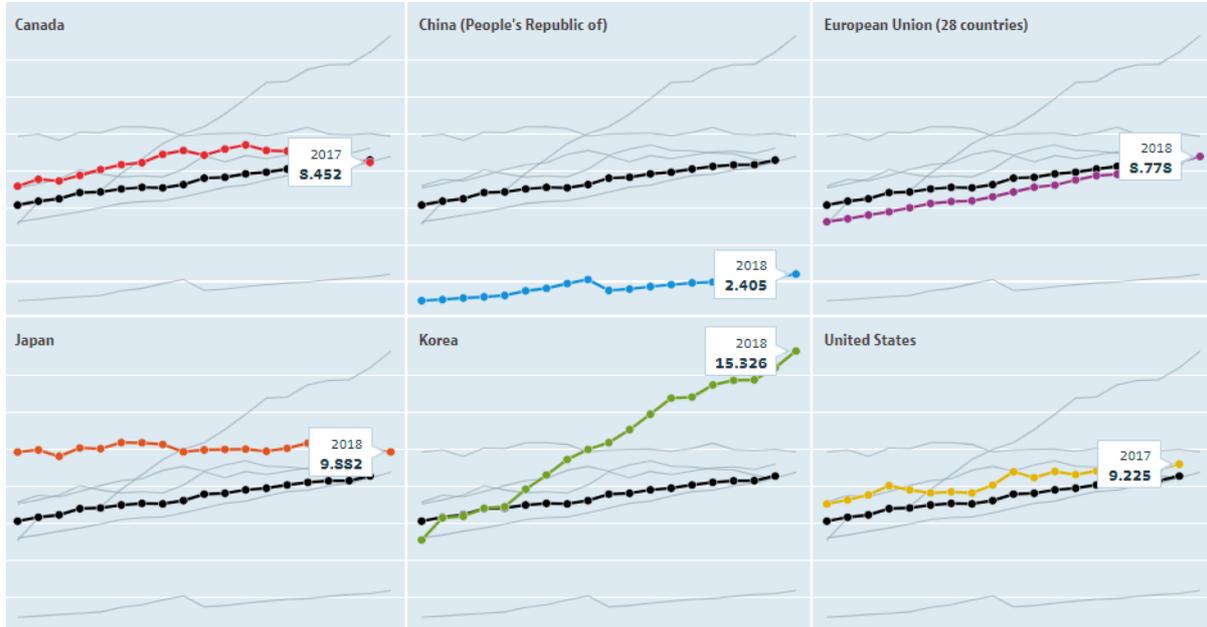


This indicator is measured in USD constant prices using 2010 base year and Purchasing Power Parities (PPPs) and as **percentage of GDP**, and should be considered looking at the different level of analysis (e.g. if related to a country or a region) and taking into consideration the different political and socio-economic systems. **However, it shows the primacy of Korea in this field with 4,5 % of GDP allocated to R&D, followed by Japan with 3,3%. The average % of GDP on R&D in these countries and regions is 2,7%.**

¹¹ This part is extracted from OECD (2020), Gross domestic spending on R&D (indicator). doi: 10.1787/d8b068b4-en

Researchers in the EU and in the IDIH Strategic Countries¹²

[Source: OECD (2020)] Researchers are professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, as well as in the management of the projects concerned.

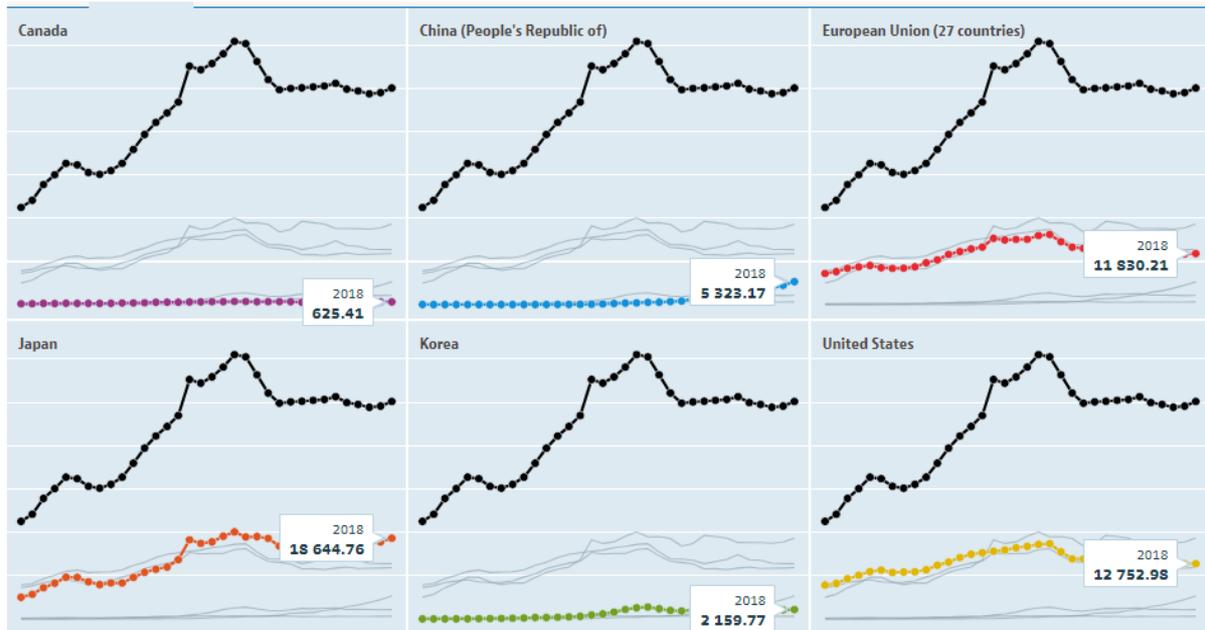


This indicator is measured in per 1 000 people employed and in number of researchers and reflects the data provided on GDP expenditure on R&D. In fact, it shows the primacy of Korea per number of reserachers (15,3 per 1000 people employed), followed by Japan with almost 10 researchers per 1000 people employed. The average of researchers in these countries and regions is 9 per 1000 people employed and shows how China is positioning at the bottom of this ranking with only 2,4 researchers per 1000 people employed.

¹² This part is extracted from OECD (2020), Researchers (indicator). doi: 10.1787/20ddfb0f-en

Triadic patent families in the EU and in the IDIH Strategic Countries¹³

[Source: OECD (2020)] A triadic patent family is defined as a set of patents registered in various countries (i.e. patent offices) to protect the same invention. Triadic patent families are a set of patents filed at three of these major patent offices: the European Patent Office (EPO), the Japan Patent Office (JPO) and the United States Patent and Trademark Office (USPTO). Triadic patent family counts are attributed to the country of residence of the inventor and to the date when the patent was first registered.



This indicator is measured as a **number**. It shows the primacy of Japan per set of patents (18.644,76), followed by USA and the EU27. Besides these top performers, the other countries are positioned all below the average of triadic family patents among the IDIH countries/regions, that is 8.556,2, with Canada at the bottom of this ranking with 625.41 triadic patent families.

¹³ This part is extracted from OECD (2020), Triadic patent families (indicator). doi: 10.1787/6a8d10f4-en

HIGHLIGHTS ON PARTICIPATION AND FUNDING UNDER THE EFP

Based on the data of the [H2020 Dashboard](#), here follows some highlights on participation and funding in the EU Framework Programme (2014-200), reported also *per country/region* involved in this Guidebook , as well as *per type of participant* and *relevant topics* (affherent to Digital Health and AHA).

Participant and funded organizations from the EU and the 5 IDIH Strategic Countries

H2020 | Overview of participation and funding

- 31.003 signed grants
- 152.199 participations
- 58,39 billions EU contribution

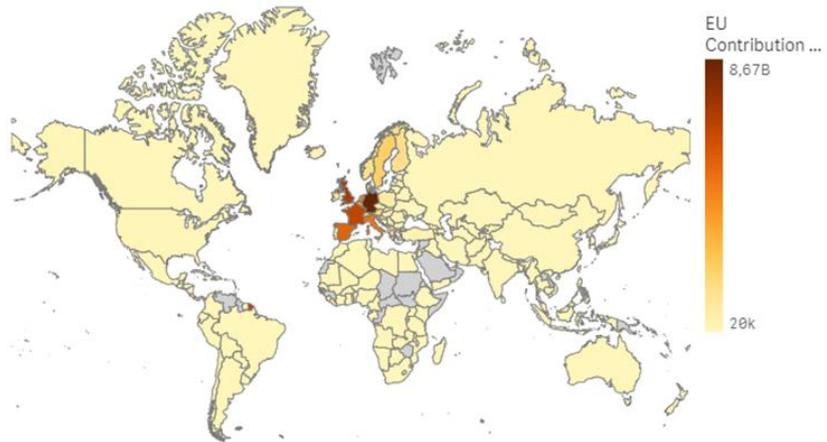


Figure 2: Net EU contribution by country (EUR) - Source: H2020 Dashboard

Figure 2 shows also how the European framework Programme for Research and Innovations has been to dates really “open to the world”.

H2020 | Participation of public/private organizations and other organizations (excluding research and education)

- 69.952 participations (45,96% of H2020)
- 20,7 billions Net EU contribution (35,44% of H2020)

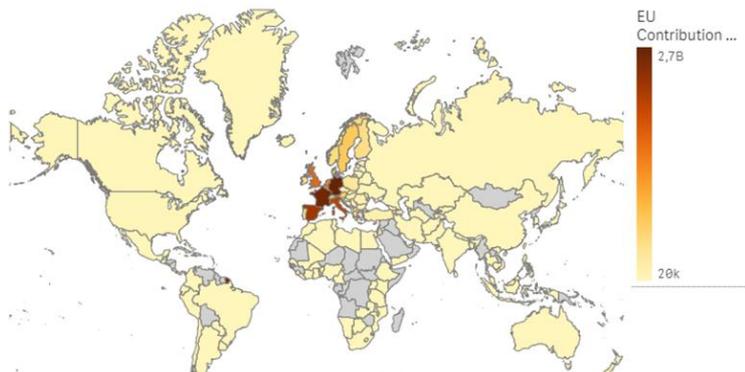


Figure 3: Net EU contribution to public/private and other organizations (excluding research and education) EUR - Source: H2020 Dashboard

Care Providers and Users associations may fall under the cathegories here mentioned, as organizations other than research and education organizations, both public or private legal entities. Figure 3 shows how the EU contribution within the framework of H2020 has been dinstrubuted among such organizations all around the world, reporting significant data about the share of this kind of participation out of the domain of research and education (45,96%: almost a half of H2020 participants, in a framework programme dedicated to Research and Innovation). This shows the great potential within H2020 of innovators and SMEs, as well as umbrella organizations and Civil Society, often laying behind such cathegories.

H2020 | Overview of participation and funding in the 5 IDIH Strategic Countries

- 1.822 signed grants (5,88% H2020)
- 2.914 participations (1,91% H2020)
- 107,6 million EU contribution (0.18 % H2020)

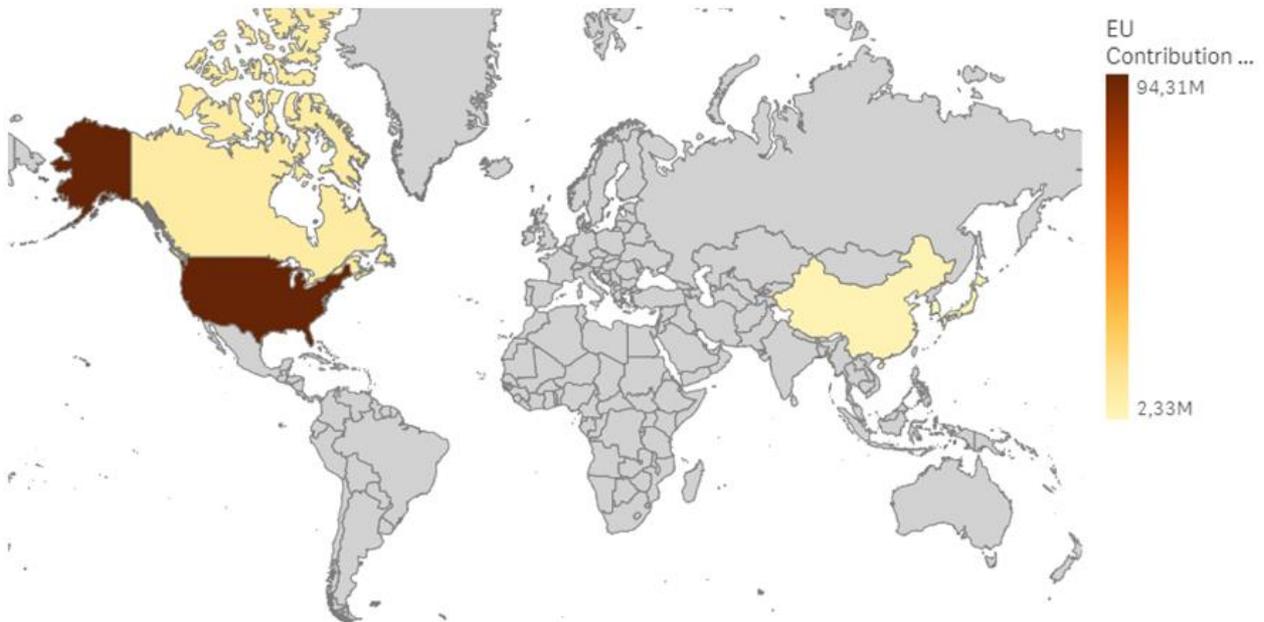


Figure 4: Net EU contribution (EUR) in the Canada, China, Japan, South Korea, and US - Source: H2020 Dashboard

Looking at the 5 IDIH strategic countries, these data shows how the participation and funding in H2020 is mainly concentrated in USA, that is beneficiary of the highest share of EU contribution (88,12M), confirming the lasting and solid partnership EU-USA. Canada is the second leading beneficiary (8,94M), followed by Japan (8,17M) and China (4,69M).

H2020 relevant topics | Overview of participation and funding

By dealing with Digital Health and AHA, the H2020 topics (2014-2020) here considered as relevant in the frame of IDIH are the following:

1. Advancing AHA with ICT: ICT solutions for independent living with cognitive impairment
2. Advancing AHA with ICT: early detection and intervention
3. Advancing AHA with ICT: service robotics within assisted living environment
4. Digital health and care service
5. Digital health and care service: support for strategies and early adoption
6. Digital health literacy
7. Digital representation of health data to improve diagnosis and treatment
8. Promoting mental wellbeing in the ageing population
9. Self management and disease and decision support systems based on predictive computer modelling used by the patient him or herself
10. Self management of health and disease: citizen engagement and mHelatth
11. Self management of health and disease and patient empowerment supported by ICT
12. Smart Health

- 13. Support to a Digital Health & Care Innovation initiative in the context of Digital Single Market Strategy
- 14. Understanding health, ageing and disease: determinants risks factors and pathways

Data concerning participation and projects under these topics in the aforementioned timeframe may be summarized as follows, reporting almost 314 millions EUR allocated to topics related to Digital Health and AHA between 2014-2020:

- 69 signed grants (0,22% of H2020)
- 853 participations (0,56% of H2020)
- **313,9 million EU contribution** (0,54% of H2020)

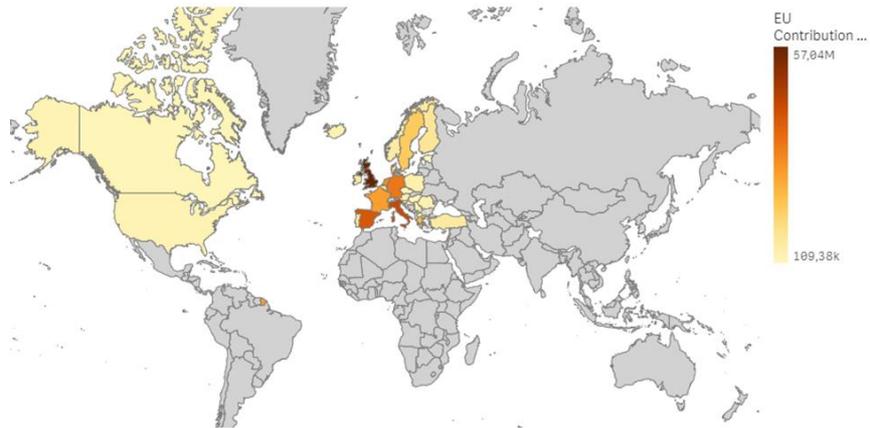


Figure 5: Net EU contribution in IDIH relevant topics (EUR) - Source: H2020 Dashboard

H2020 relevant topics | Overview of participation and funding in the 5 IDIH Strategic Countries

By focusing on IDIH strategic countries (Canada, China, Japan, South Korea, and US), data concerning the relevant IDIH topics are reported below:

- 8 signed grants (0,03% of H2020)
- 15 participations (0,01% of H2020)
- **2,35 million EU contribution**



Figure 6: Net EU contribution in IDIH relevant topics in Canada, China, Japan, South Korea, and US (EUR) - Source: H2020 Dashboard

As showed, participation and funding are concentrated in Canada and USA, with 2 participations from Japan, 1 participation from South Korea and 1 participation from China.

STORIES

Stories

AGE Platform Europe



AGE Platform Europe is an umbrella organisation of associations of and for people aged 50+. AGE works to voice the needs and concerns of people as they age and to convey them to the European institutions, rooting for a age-friendly society and environments.

Set up in 2001, AGE joined the first European projects in 2006, supporting its policy activities, namely in the field of social inclusion and employment. The involvement in projects activities grew exponentially, since AGE was granted a 7th Framework Programme project. Working on the research perspective for healthy ageing brought the Secretariat team to grow in number and competences covered. Thanks to project activities, initially funded by 7th Framework Programme and then by Horizon2020, AGE was able to work on **digital technologies, on ethical issues of health and care, on mobility, standards, housing and even senior tourism** (that under an EASME grant), thus **providing update information on the ground research on the various topics, suitable to inform the policy level.**

Through more than 20 successfully concluded research projects, **AGE collaborated with countries all over Europe and could benefit from exchanging with users, researchers and policy-makers around the continent. It was interesting to see how cultural and social issues structure the outcomes of some meetings!** For instance, organising a user forum in Spain means to consider that the meeting should not start before 10h30 and then the lunch break would not be before 14. Dinners also happen later than in other countries, which made it hard for some Finnish and Danish attendees to follow until the end of the day! On the other hand side, the ambiance is so lively and caring, which helps overcoming the difficulties of changing schedules, being in a foreign country where one does not know the language and is not accustomed to the rhythm of social interactions.

Sitting in a working table with different cultures and perspectives is also definitely mind-opening. You get to grasp perspectives and nuances that would have difficultly be available by an austere literature review; you get to understand what consequences some actions may have in cultures and way of thinking different from yours.

Isn't this at the essence of any research, to be as comprehensive and open as possible?

Ilenia Gheno,
Research Project Manager

Smart Health Care and Home Care (China)



中国老年学和老年医学学会智慧医养分会

SMART HEALTH CARE AND HOME CARE BRANCH OF CHINA ASSOCIATION OF GERONTOLOGY AND GERIATRICS

*I'm representing a newly established organization that is part of the China association of Gerontology and Geriatrics. It is a branch of this association called "Smart Health Care and Home Care" that was established in 2018, whose members are mainly **research institutions, but also professionals and industry providers in the frontline of senior care**. We actually realize a meeting at academic level once a year addressing "smart health care and smart senior care".*

*The China Association of Gerontology and Geriatrics of which we are part is the oldest association in China in the field of aging, established on 1986; almost all the other organizations in this field are under its umbrella. As you may know, **in China the government is the major primary forces behind aging and health care**, so we normally work very closely with central and local government.*

*In 2018, Ministry of Industry and IT, Ministry of Civil Affairs, National Health Commission jointly launched a program to identify a number of successful cases of technologies applied to health aging. So far, a few hundred such cases have been identified and published. One of the key criteria is "Users-Centric". Moreover, Shanghai government recently published a list of users-centered scenarios of digital application in AHA, which has received a lot of positive reactions. **I believe that using these kinds of users-centered application scenarios to guide the development of the technologies will become more and more common in China.***

***International collaborations with China, in my opinion, are more feasible if focusing on technical areas, instead of philosophical or ideological issues.** China is still a developing country, and tends to spend money on carefully selected areas, any ideas on large scale spending that would drain the government financial resources would be ignored.*

***I would suggest to potential applicants for funding in China to find a stable, responsive partner in China, and to be sensitive to the current funding focus in China.** The areas of the collaboration should be those where China has obvious weakness, lack of experience or expertise; more application-oriented instead of theoretical work. Moreover, the collaborated work should avoid any political sensitive issues, or results that can be applied only after significant government structure reforms.*

Jie Wang
Vice President



Aging 2.0 (a global network)

AGING 2.0

Aging 2.0 is a global network for innovation in aging.

We currently have 120 cities around the world where our Chapters operate, all run by volunteers, bringing together technology companies, industry providers, research and users' groups, all engaged in connecting tech with aging.

We have [Grand challenges](#) which we are looking to solve, also supported by our [network sponsors](#). We are now building out the world's first collective intelligence platform for innovation in aging, [The Collective](#), that will connect thousands of innovators with providers. The digital tool is being developed by Shapeable.ai, drawing on their experience building technology solutions for the World Economic Forum, among other global organizations.

In 2018, we were hosted by CABHI in Toronto for a [forum on Brain Health](#) in 2018. Moreover, we produced the report [Crossing Digital Divide](#) sponsored by Nomura Research Institute. As stated in the report, **this is the first of a series of reports and workshops, to enhance understanding, build business opportunities and partnerships, and bring solutions to critical social issues.** It is the starting point of a collaborative innovation process, enabled by The Aging2.0 Collective, and making use of its network of 125+ city chapters and 30,000+ subscribers.

Our Topic Teams are working on many of the challenges facing aging society and the longevity economy. **Following this first activity of 'Framing the Challenge' the expert group will generate further insights, bringing perspectives from the older adult, business, local community, and policy-making.** A definition of business opportunities and ideas for solutions will be released as a follow-on report.

Stephen Johnston,
Co-Founder

European Institute of Women's Health (EIWH)



I'm representing the [European Institute of Women's Health](#) that was founded in 1996. It is a non-governmental organisation set up to **promote gender equity in public health, research and social policies across the Europe**. We promote gender-specific biomedical and socio-economic research, to ensure quality and equity in health policy, research, treatment and care for women and their families throughout their lifespan. We used an **evidence-based approach**, and we do this in our position papers and policy briefs where we are taking to the European Commission or the European Parliament, or other NGOs. We work very close with the European Commission and we have been engaged in the Aging and Disability Expert Group, as well as in the H2020 Societal Challenge on Health, demographic change and wellbeing, as expert advisor on gender. **In 2016, we contributed as experts to the WHO strategy on Gender Women's' Health in Europe**. We also provide advice to the European Medicine Agency and we are part of the Advisory Group of the European Centre for Disease Control and Prevention, also dealing with Health Technology.

The project funded under the 7th Framework Programme entitled THEME¹⁴ represent our significant experience in collaborative projects under European Framework Programmes. Within that project we partnership with Italy, Denmark, Bulgaria, Norway, Ireland, and France. As main outcomes achieved through cooperation, I can mention: **a Literature review including gender in pandemics and epidemics, a Gender website, Annual workshops for Health Care Professional, a Roadmap on Open and Responsible research on Pandemics, Citizens Meeting report, and a High Level Policy Forum**.

I could experience different approaches of partners to tasks, working together positively to reach the goals of the organisation. **Working with multidisciplinary consortium was a learning experience on reaching consensus, on how to approach and overcoming language barriers.**

To anyone intends to to access funds for collaborative project I would say that **networking at events that are relevant to their work is crucial! Stay up to date on the EU Framework Programme for Research and Innovation and its related events/webinars** in order to gain knowledge on the EU research priorities and themes and to meet potential future project partners, or to put a consortium together yourself for your research idea!

**Peggy Maguire,
Director General**

¹⁴ SiS.2013.1.2-1 SiS.2013.1.2; Mobilisation and Mutual Learning (MML). Action Plans: mainstreaming Science in Society actions in research

FUNDING PROGRAMMES

Funding

Digital Health for AHA in the EU: policy priorities and and programmes

A new level of ambition to boost the scientific, economic and societal impact of EU funding is, therefore, now promoted by the EC in the field of R&I. This, in order to “shape the future” of the EU in line with the 17 SDGs set by the [UN Agenda 2030](#), from which the same [6 political priorities of the EC for 2019 – 2024](#) arise.

[Shaping Europe's digital future](#) is now one of the goal of the European Commission that want a *Europe fit for the digital age*, in order to boost business development and enable citizens to reap new benefits, among which improved diagnosis and better public services in health and care¹⁵.

The **health and well-being** of its people, indeed, is a central aim of the European Union, its policies and programmes. Providing timely access to affordable, preventive and curative health care of good quality to everyone is amongst the key aspirations the EU and its Member States.

According to **Article 168 of the Treaty on the Functioning of the EU**, high level of human health protection shall be ensured in the definition

and implementation of all Union policies and *activities*. With the proclamation of the **European Pillar of Social Rights**, the EU set the direction towards a fairer, inclusive and more social Europe for all European citizens based on a European social model that is fit for the challenges of the 21st century.

Moreover, a special emphasis is placed on wellbeing of people and, in particular, to their **Mental Health**, as a factor of increasingly importance for the economic growth and social development of Europe.

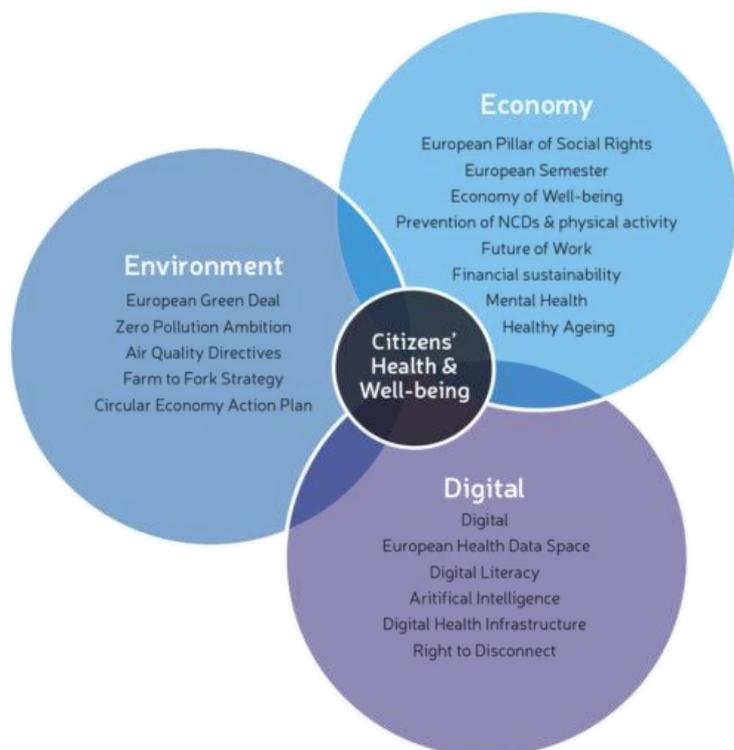


Figure 7: All Policies for a Healthy Europe: an intersectoral initiative (<https://healthyeurope.eu/>)

¹⁵ See the [Political Guidelines for the European Commission 2019-2024](#)

Finally, as mentioned, the EU is strongly committed to the **UN Sustainable Development Goals (SDGs)**, many of which have an important impact on health and well-being, notably SDG 3 (Good Health and Well-being for People) with its nine health-specific targets aiming for **universal health coverage for all at all ages by 2030, leaving no one behind, and ending preventable deaths**.



Addressing major health-related challenges, such as the demographic change and the ageing population, responds, thus, to the EU's commitment at international level, in accordance with the **United Nation's 2030 Agenda for Sustainable Development**, as well as the [global strategies and plans of action of the World Health Organization \(WHO\)](#).

In this framework, the EU's policy goals and strategies, notably to the **EU Pillar of Social Rights**, the **EU Digital Single Market**, and the **EU Directive on cross-border healthcare**, lay the foundations for the action of the Union in response to the challenge of the ageing population through innovation.

According with the division of competences between the EU and Member States, established by the Treaties, **EU health-related actions aim to complement national health policies** and, thus, support EU Member States in reaching all these ambitious goals, which will not be possible without a massive investment in R&I at the national, European and international level.

While we are expected to reach approximately 8.6 billion people in the world in 2030, and 9.8 billion in 2050¹⁶, populations are also ageing overall. Among the global challenges that identify **strategic areas for international cooperation** for the EU, **demographic change and ageing** represent, therefore, a key driver for transformation in the region, that shapes major social, economic, political, environmental, and technological changes. Climate change, labour markets, migration, health- and long-term care and public spending are all issues that are affected by these drivers.

¹⁶ See World Population Prospects 2017 by UN at <https://www.un.org/development/desa/en/news/population/world-population-prospects-2017.html>

Horizon Europe

About

HORIZON EUROPE | About



Horizon Europe. The Research and Innovation Framework Programme of the EU. | As part of the EU's proposal for the next EU long-term budget (2021 – 2027), the multiannual financial framework (MFF), the European Commission has published in June 2018 its proposal for “Horizon

Europe”, an ambitious €100 billion investment that will succeed “Horizon 2020” as a Framework Programme for Research and innovation¹⁷. **A new level of ambition to boost the scientific, economic and societal impact of EU funding is, therefore, now promoted by the EC in the field of R&I.** This, in order to “shape the future” of the EU in line with the 17 SDGs set by the [UN Agenda 2030](#), from which the same [6 political priorities of the EC for 2019 – 2024](#) arise.

FIND MORE ABOUT | The legislative path towards the adoption of Horizon Europe

- [Legal texts and factsheets](#) for Horizon Europe (2018)
- Factsheet about [research and innovation in the new EU budget](#) (2018)
- [Agreed text on Horizon Europe regulation](#) (2020)
- [Corrigendum to the agreed text on Horizon Europe regulation](#) (2020)
- [Agreed text on specific programme decision](#) (2020)

Programme Architecture

HORIZON EUROPE | Programme Architecture

In this time framework, based on the proposal of the EC and the recent agreements at the level of EU institutions, **the objectives of the Programme** are the following:

HORIZON EUROPE | Objectives

- Strengthen EU science and technology thanks to increased investment in highly skilled people and cutting-edge research
- Foster the EU's industrial competitiveness and its innovation performance, notably supporting market-creating innovation via the European Innovation Council and the European Institute of Innovation and Technology
- Deliver on the EU's strategic priorities, such as the Paris Agreement on climate change, and tackle global challenges that affect the quality of our daily lives

¹⁷ On 29 September 2020, the Council of the EU finalised its position on the proposed regulation establishing Horizon Europe and proposed decision on the specific programme implementing Horizon Europe. The agreement paves the way for the conclusion of negotiations, which will now have to be undertaken with the European Parliament in trilogues, for the adoption of the two legal acts by the end of 2020.

In order to address these objectives, the new programme will be implemented through **three pillars**, supported by activities to widen participation and strengthening the ERA - European Research Area (Figure 10).

ONE PROGRAMME, TWO APPROACHES:



Bottom-up: it concerns those funding schemes that are open to any R&I idea and topic from the applicants.



Top-down: it concerns those funding schemes in which applicants are asked to respond exactly to the topic described by the EC Commission Work Programme.

Specific objectives of the Programme

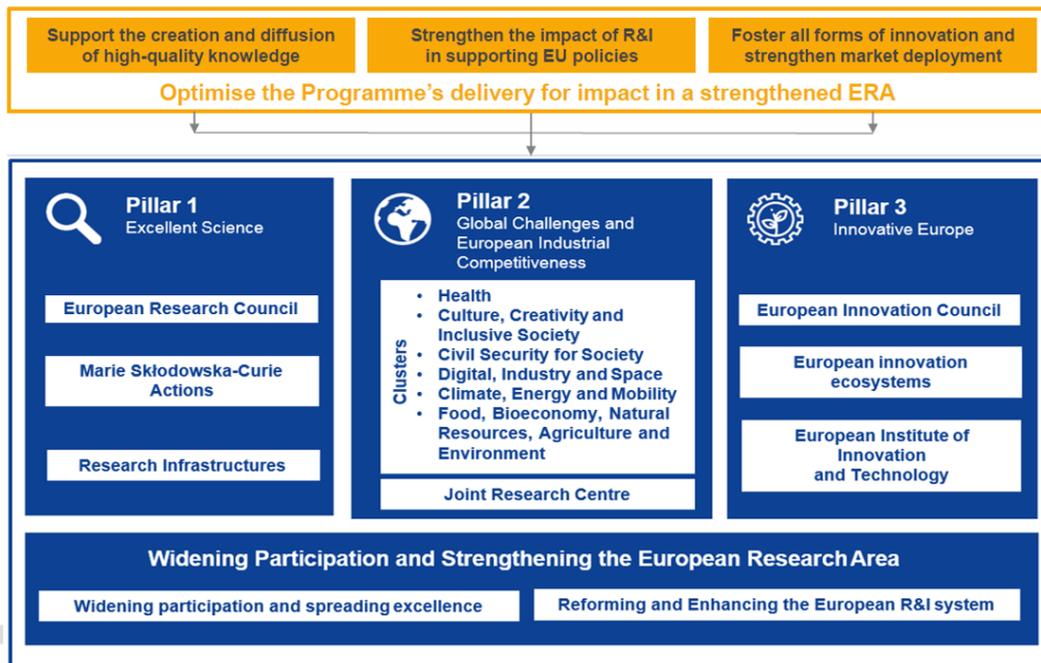


Figure 8: The structure of Horizon Europe (Source: EC)

The **first pillar "Excellent Science"** will ensure solid continuity with Horizon 2020 in supporting scientific excellence following a **bottom-up** approach, in order to strengthen the Union's scientific leadership and develop high quality knowledge and skills through the European Research Council, the Marie Skłodowska-Curie actions and the development of Research Infrastructures.

The **second pillar "Global Challenges and Industrial Competitiveness"** will address societal issues and industrial technologies through a **top-down** approach that will focus on the Union's global policies as well as challenges and opportunities for a more competitiveness of the EU at global level.

Even if innovation will be supported across the whole program, the **third pillar is dedicated to "Open Innovation"**. Featured by a **bottom-up** approach, this pillar essentially focuses on the gradual expansion of pioneering and market-creating innovations. This will be made possible through the establishment of the European Innovation Council, and the support for the improvement of European

innovation ecosystems and the European Institute of Innovation and Technology (EIT), which will offer a single entry point for high-potential innovators. Support will also be provided for collaboration with and between national and regional innovation agencies, but also with any other public or private entity, general or sectoral actor in the European innovation landscape.

The three pillars will be underpinned by activities to **widening participation and strengthening the European Research Area (ERA)**¹⁸, specifically: sharing excellence to fully exploit the potential in less R&I performing countries so that they attain high Union standards of excellence (e.g., via teaming, twinning, ERA chairs); and reforming and enhancing the European R&I system. The support to *enhanced international cooperation* is also included in this part of the Programme¹⁹.

Participation features

HORIZON EUROPE | Participation features

In continuity with the provisions of the previous framework programme “Horizon 2020”, even under Horizon Europe there is a difference between who can participate to the programme and who can receive funds.

HORIZON EUROPE | Eligibility criteria for funding

- **Entities are eligible for funding if they are established in a Member State or associated country**
- **Entities established in a non-associated third country should in principle bear the cost of their participation.**
 - (!) However, for low to middle income countries and exceptionally for other non-associated third countries they could be eligible for funding in an action if:
 - a) The third country is identified in the work programme adopted by the Commission;
 - b) Or the Commission or funding body consider that its participation is essential for implementing the action.
- **Affiliated entities** are eligible for funding in an action if they are established in a Member State, Associated country, [or in a third country] identified in the work programme adopted by the Commission.

HORIZON EUROPE | Eligibility criteria for participation

- **Any legal entity, regardless of its place of establishment, including legal entities from non-associated third countries or international organisation** may participate in actions under the Programme.
- **Entities shall be part of a consortium that shall include at least three independent legal entities** each established in a different Member State or associated country and with at least one of them established in a Member State, unless the work programme provides otherwise, if duly justified.
 - (!) **The European Research Council (ERC) frontier research actions, European Innovation Council (EIC) actions, training and mobility actions or programme co-fund actions** may be implemented by one or more legal entities, one of which must be established in a Member State or associated country.

¹⁸ The EC on September 30, 2020 has defined a new strategy for the European Research Area, in order to support the ecological and digital transition and the recovery of the Union. See: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:628:FIN>

¹⁹ Other activities foreseen to strengthen the ERA will be: foresight activities; monitoring and evaluating the Framework Programme and disseminating and exploiting results; modernising European universities.

Where appropriate and duly justified, the work programme may provide **additional eligibility criteria** according to specific policy requirements or to the nature and objectives of the action, including the number of legal entities, the type of legal entity and the place of establishment.

Funding Schemes

HORIZON EUROPE | Funding Schemes

Currently, there is no official and specific information/orientation which envisages the possibility that the future Horizon Europe's *Types of Action* (funding schemes) will change. Therefore, it is assumed that these will remain the same as those in H2020.

The **type of action** specifies:

- the scope of what is funded
- the reimbursement rates
- specific evaluation criteria to qualify for funding
- the use of simplified forms of costs like lump sums

The maximum rate per action shall be fixed in the Work Programme and shall apply for all activities funded under the Type of Action.

In general, the **Programme may reimburse up to 100 % of total eligible costs of an action**, except for:

- a) **Innovation Actions:** up to 70 % of the total eligible costs, except for non-profit legal entities where the Programme may reimburse up to 100 % of the total eligible costs;
- b) **Programme co-fund actions:** at least 30 % of the total eligible costs, and in identified and duly justified cases up to 70 %.

These funding rates shall also apply for actions where flat rate, unit or lump sum financing is fixed for the whole or part of the action.

Here follows, an overview that summarizes about the three main Types of Actions assumed to be foreseen also in Horizon Europe:

HORIZON EUROPE Types of actions ²⁰	
Research and Innovation Actions (RIAs)	<ul style="list-style-type: none">▪ EU funding rate: 100%▪ Description: Activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution. For this purpose they may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment. Projects may contain closely connected but limited demonstration or pilot activities aiming to show technical feasibility in a near to operational environment. <p>(!) In case of Research and Innovation Lump Sum actions (RIA-LS), funding for grants awarded will take the form of lump sums. For more information on the</p>

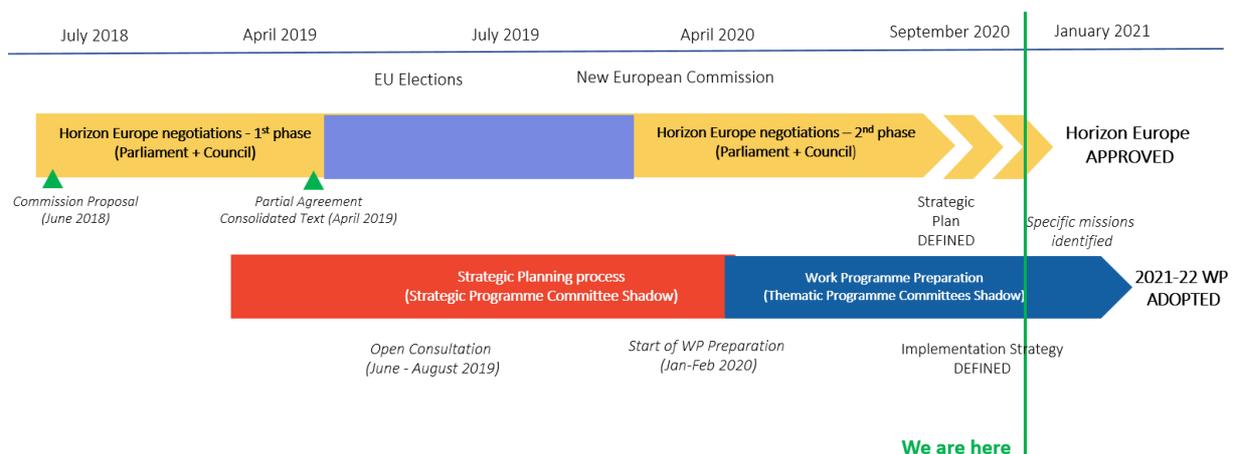
²⁰ These information are to be confirmed following the final approval and adoption of the Horizon Europe Programme.

	specificities of Lump Sum actions in H2020, see the video or check the presentation .
Innovation Actions (IAs)	<ul style="list-style-type: none"> ▪ EU funding rate: 70% (except non-profit, which are still funded 100%) ▪ Description: Activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services. For this purpose they may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication. <p>(!) In case of Innovation Lump Sum actions (IA-LS), funding for grants awarded will take the form of lump sums. For more information on the specificities of Lump Sum actions in H2020, see the video or check the presentation.</p>
Coordination and support actions (CSAs)	<ul style="list-style-type: none"> ▪ EU funding rate: 100% ▪ Description: Accompanying measures such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies. <p>(!) In case of Coordination and support Lump Sum actions (CSA-LS), funding for grants awarded will take the form of lump sums. For more information on the specificities of Lump Sum actions in H2020, see the video or check the presentation.</p>

Official documentation

HORIZON EUROPE | Official documentation

The path towards the final approval and adoption of the Horizon Europe Programme, that is planned for January 2021, with the launch of the first Call for proposals by March 2021, may be summarized as follows.



This path has included to date two main processes:

- The **Strategic Planning**: dedicated to the preparation of the content in the work programmes, resulting in a [Strategic Plan](#)²¹ covering a maximum period of four years.

²¹ This is a draft, to be updated.

- The **preparation of the consequent Work Programmes** for each theme of Horizon Europe, which will include the Call for Proposals for the first 2 years of implementation.



Figure 13 summarizes how these 2 processes are connected and will lead to the Horizon Europe implementation, following an impact-oriented approach.

A new glossary is at the base of this approach and highlights how to respond with project proposals to the policy priorities set by the EC under Horizon Europe.

Figure 9: Horizon Europe: from the Strategic Plan to the Work Programmes (Source: EC)

This glossary responds to the Horizon Europe logical framework that from its legal base goes to the implementation of the Work Programme. In this framework, the **legal texts** - that constitutes the proposal of the EC to the Parliament and the Council of the EU – have provided the structure of the Programme (*Pillars*) and its *Areas of Intervention*. From this proposal, the **Strategic Planning** process has produced a set of *KSOs* – *Key Strategic Orientations* that are in line with the policy priorities of the EC and identify the *Expected Impacts* of the Programme as a whole. These impacts will turn in *Destinations* of the **Work Programmes** that will include the Call for proposals for the first years of implementation. Each Call for proposals will be built around different *Topics* (project outcomes) to which each project proposal will respond by concretely producing a set of deliverables (project outputs).

	DEFINITION
STRATEGIC PLAN	EC POLICY PRIORITY Based on the Political Guidelines for the European Commission 2019-2024 with a focus on three key priorities : Green Deal, Europe fit for a digital age, Economy that works for people
WORK PROGRAMME	KEY STRATEGIC ORIENTATIONS FOR R&I SUPPORT = A set of strategic policy objectives that set the directions for R&I investments in order to achieve the political guidelines and policy objectives of the new Commission
PROJECT PROPOSAL	EXPECTED IMPACTS => DESTINATIONS = long term targeted effects on society (incl. the environment), the economy and science enabled by the outcomes of EU R&I investment
	EXPECTED OUTCOMES => TOPICS = Uptake, diffusion, use and/or deployment of project's outputs expected by direct project target groups (medium term).
	EXPECTED OUTPUTS => DELIVERABLES = Deliverables to be generated by the project during its implementation, such as a report, a database, a publication, a prototype, trained researchers, new infrastructures, etc. (short term).

The **key strategic orientations** and **expected impacts** set the scene for the R&I activities and outputs to be defined in the work programmes under Horizon Europe's Pillar II, Global Challenges and European Industrial Competitiveness for 2021-2024.

- **KSOs** | The key strategic orientations have been defined to set out the R&I contribution to EC political priorities ('whole of government' approach). They aim at creating a strong bridge between R&I and EU policy priorities, and at giving directionality towards the UN SDGs – across all clusters (and HE parts).
- **The pathway to IMPACT** | The way that project **RESULTS** can contribute towards their *outcomes* (medium term) and *wider impacts* (long term) relevant for the topic. The impacts define the wider effects on society, the economy and science to be targeted by R&I activities, but not the manner in which to achieve them. This is entirely up to the imagination and skill of the applicants. The impacts are structured by the **six clusters** that make up Horizon Europe's second Pillar, "Global Challenges and European Industrial Competitiveness".

Relevant Funding Schemes

HORIZON EUROPE | Relevant Funding Schemes

Here you find an overview of the funding instruments under Horizon Europe that are relevant for international cooperation in the fields of Digital health and AHA, described according with the two Pillars (I and II) that actually include opportunities in these fields.

PILLAR I

HORIZON EUROPE | PILLAR I – Excellent Science

The Pillar I – Excellent Science aims to **reinforce and extend the excellence of the Union's science base**.

This Pillar encompasses three relevant specific programmes.

The budget assigned to this Pillar is currently about 23 billion EUR²², of which:

- EUR 14 861 000 000 for the European Research Council
- EUR 6 288 000 000 for Marie Skłodowska-Curie Actions
- EUR 2 149 000 000 for Research Infrastructures

Here follows some highlights on the specific programmes suitable for care providers and users.



Marie Skłodowska-Curie Actions (MSCAs) | Marie Skłodowska-Curie Actions (MSCA) is a programme that intends to facilitate cross-border and cross-sector mobility and training of researchers.

The MSCA are **the main instrument at EU-level for attracting researchers from third countries to Europe**, thus making a major contribution to global cooperation in research and innovation. Evidence shows that the MSCA not only have a positive impact on individuals, organisations, and at system level, but also yield high-impact and breakthrough research results while at the same time contributing significantly to societal as well as strategic challenges. Long-term



²² See the [proposal approved by the Council of the EU](#) on September 29, 2020.

investment in people pays off, as indicated by the number of Nobel Prize winners who have been either former MSCA fellows or supervisors

MSCA | Main features of the programme:

- **For researchers at every stage of their career**
- Coverage for all domains of research (*bottom-up* approach).
- Support the mobility, training and career development of researchers from all over the world through excellent doctoral programmes, postdoc fellowships and collaborative projects.
- **Participation of non-academic sector strongly encouraged, especially industry and SMEs.**
- Promotion of attractive working and employment conditions (financing rate of up to 100%).

MSCA intervenes on 5 areas of intervention

- mobility of researchers
- training of researchers
- strengthening human capital across the ERA (by spreading best practices across institutions and systems)
- facilitating synergies
- promoting public outreach

[!] STAY UP TO DATE | To stay up to date with next deadlines for application, check [here](#) the Funding and Tenders Portal.

[!] MORE ABOUT | [presentation by Claire Morel](#), Head of Unit, EAC.C2, European Commission DG Education, Youth, Sport and Culture.

Among the 5 funding instruments foreseen under MSCA²³, the following may be of particular interest for Users Associations that intend to promote Research among citizens, for the benefit of their final users.

Title		5 MSCA and Citizens
Type of action		<ul style="list-style-type: none"> ▪ Continuation of the European Researchers' Night²⁴: it is a Europe-wide public event that brings researchers closer to the public. The Night provides researchers the opportunity to showcase the diversity of science and its impact on citizens' daily lives, and to stimulate interest in research careers – especially among young people. The events highlight how researchers contribute to our society by displaying their work in an interactive and engaging forum. ▪ Extension to existing outreach events: supporting also other science festivals and outreach events with EU-added value
Eligibility criteria		<ul style="list-style-type: none"> ▪ European Researchers' Night grants may be awarded to any legal entity established in an EU Member State or Associated Country. Legal entities involve the coordination of activities between local, regional, national or international partners.

²³ Doctoral Networks, Postdoctoral Fellowships, Staff Exchanges, COFUND, MSCA and Citizens.

²⁴ In 2019, 55 projects were implemented. The projects took place in 433 cities from 27 countries across Europe and beyond. Over 1.6 million visitors attended the event and over 36,000 researchers took part – including 955 MSCA fellows. In 2020, the European Researchers' Night will take place on Friday, 27 November.

- Possible beneficiaries' profiles may include private and public research organisations, companies, public authorities, schools, science museums, parent-teacher organisations, EU mobility centres for researchers, foundations or the media.



Also Care Providers may benefit from this specific programme, especially by drawing on the whole range of findings resulted from the research projects of MSCA investigators all around the world.

Take a look into the database of funded projects in the [Appendix](#) this Guidebook!



Research Infrastructure (RI) | Research Infrastructure (RI) is a specific programme of Horizon Europe aimed at empowering Europe through world class and accessible Research and Technology Infrastructures.

As in the example here below, both Care Providers and Users associations **may benefit from the activities and achievements of this specific programme, especially by participating to/drawing on the whole range of data around AHA.**



SHARE-ERIC | A research infrastructure on Ageing

The [Survey of Health, Ageing and Retirement in Europe \(SHARE\)](#) is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks of about 140,000 individuals aged 50 or older (around 380,000 interviews). SHARE covers 27 European countries and Israel.

SHARE contributes to research about the social, health and economic impact of COVID-19. In June 2020, SHARE resumed Wave 8 fieldwork via telephone interviews including a special "SHARE COVID-19" questionnaire. The data collected with this questionnaire will allow examining in-depth how the risk group of the older individuals is coping with the health-related and socioeconomic impact of COVID-19. The great advantage of these data will be the possibility to measure and interpret differences in a cross-country and a longitudinal dimension.

The new RIs will be oriented to better address new global environmental, social and economic challenges, considering that the renewed ERA requires a more explicit contribution of research infrastructures themselves to Europe's wider policy objectives, thus putting science at the service of the society and increasing Europe's competitiveness.

RI | Main objectives of the programme

- Consolidate and enhance the EU research infrastructures landscape.
- Support **Open Science and data driven research** through the European Open Science Cloud (EOSC) and high capacity network.
- Enable and drive the **green and digital transformation** through research infrastructure services.
- Push the limits of frontier research.
- Develop cutting edge technologies for RIs and foster innovation.
- **Enhance the international dimension of RIs.**

Under Horizon Europe, the Research Infrastructure programme (RI) will intervene in **4 areas of intervention**:

- Consolidating the landscape of European research infrastructures
- Opening, integrating and interconnecting research infrastructures
- The innovative potential of European Research Infrastructure and activities for Innovation & Training
- Reinforcing European research infrastructure policy and international cooperation

PILLAR II

HORIZON EUROPE | PILLAR II – Global Challenges and European Industrial Competitiveness

The Pillar II – *Global Challenges and European Industrial Competitiveness* aims to:

- generate knowledge, **strengthen the impact of research and innovation** in developing, supporting and implementing Union policies and support the access to and uptake of innovative solutions in European industry, notably in SMEs, and society to address global challenges, including climate change and the Sustainable Development Goals.



This perspective is reflected both in the consistency with the other parts of the Program and in the systemic approach oriented to impact on which this Pillar is based, requiring, thus, particular efforts for **interdisciplinary and intersectorality** in research actions, that envisage significant opportunities for **Care Providers and Users associations**.

PILLAR II | Main features:

- improve **societal issues** and industrial technologies with a **top-down approach**
- **Integration among Clusters**, with a series of intervention sectors to encourage interdisciplinary, intersectoral, transversal and international collaboration, thus obtaining a higher impact and **better grasping the innovation potential which is often greater at the intersection points of disciplines and sectors**
- the essential role of **industry** in achieving all program objectives, also fostered by investments in the key enabling technologies of the future

PILLAR II | Key-novelties elements:

- Inclusion of **Partnerships** (new rationalization on three categories) and **Missions** (which will pursue ambitious but achievable and limited objectives over time, encouraging citizen participation)
- Increased participation in research and funding by **entities from low- and middle-income countries**
- The role of the [JRC \(Joint Research Centre\)](#) as a source of scientific data and technical assistance in support of Union policies

The budget assigned to this Pillar is currently about 47 billion EUR²⁵, of which:

- EUR 6 893 000 000 for cluster *Health*
- EUR 1 253 500 000 for cluster *Culture, Creativity and Inclusive and Secure Society*
- EUR 1 253 500 000 for cluster *Civil Security for Society*
- EUR 13 429 000 000 for cluster *Digital, and Industry and Space*
- EUR 13 429 000 000 for cluster *Climate, Energy and Mobility*
- EUR 8 952 000 000 for cluster *Food, Bioeconomy, and Natural Resources, Agriculture and Environment*
- EUR 1 970 000 000 for the non-nuclear direct actions of the *Joint Research Centre (JRC)*

This Guidebook here presents the 2 Clusters that are particularly relevant for R&I in Digital Health and AHA:

- **CLUSTER 1 - Health**
- **CLUSTER 4 - Digital, Industry and Space**

CLUSTER 1 | Health

The R&I activities under this Cluster will **develop the knowledge base, build the research and innovation capacity and develop the solutions needed for a more effective promotion of health and the prevention, treatment and cure of diseases**. Improving health outcomes will in turn result in increased life expectancy, healthy active lives and productivity of working age people, and sustainability of health and care systems. Therefore, through the initiatives funded under this Cluster, Horizon Europe intends to build **close linkages between discovery, clinical, epidemiological, environmental and socio-economic research** as well as with regulatory sciences.

CLUSTER 1. Health

Improving and protecting the health of citizens at all ages, by developing innovative solutions to prevent, diagnose, monitor, treat and cure diseases; mitigating health risks, protecting populations and promoting good health; making public health systems more cost-effective, equitable and sustainable; and supporting and enabling patients' participation and self-management.

- ▣ Health throughout the life course
- ▣ Non-communicable and rare diseases
- ▣ Tools, technologies and digital solutions for health and care, including personalised medicine
- ▣ Environmental and social health determinants
- ▣ Infectious diseases, including poverty-related and neglected disease
- ▣ Health care systems

APRE

Cluster 1 Health | Main features of the Cluster:

- The Health Cluster has a **top-down** approach. Applications can be submitted only in response to the topics identified by the EC.
- Only **collaborative projects** are eligible.
- Required *interdisciplinarity* and *intersectoriality*, harnessing the combined skills of **academia and industry** in collaboration with the **health services, patients, policy-makers and citizens**. This will allow to better uptake results in clinical practice as well as in health care systems.

²⁵ See the [proposal approved by the Council of the EU](#) on September 29, 2020.

- **Personalised Medicine** and **Digitalization** are considered as transversal aspects across the Cluster destinations.

R&I interventions under Cluster 1 Health will be oriented towards **six health-related challenges**, that represent the **destinations** included in the Work Programme of the Cluster. Among these 6 destinations identified by the EC proposal for Horizon Europe, three are particularly relevant for Digital Health and AHA:

- **DESTINATION 1: Staying healthy in a rapidly changing society**
 - Related Areas of intervention:
 - Health throughout the Life Course
 - Environmental and Social Health Determinants
- **DESTINATION 3: Tackling diseases and reducing disease burden**
 - Related Areas of intervention:
 - Environmental and Social Health Determinants
 - Non-communicable and Rare Diseases
 - Infectious Diseases
- **DESTINATION 5: Unlocking the full potential of new tools, technologies and digital solutions for a healthy society**
 - Related Areas of intervention:
 - Tools, Technologies and Digital Solutions for Health and Care
 - Health Care Systems

These Destinations are described as follows, based on their related **Key R&I Orientations**, that are the **research and innovation interventions and results identified by the EC as needed to tackle the health-related challenges**²⁶.

Destination	1 Staying healthy in a rapidly changing society
Key R&I orientations	<p>Research and innovation aims at supporting citizens in pursuing healthy and active lives by providing suitable and tailor-made solutions, including for people with specific needs, such as rehabilitation.</p> <ul style="list-style-type: none"> ▪ Better understanding of human health at various developmental stages and their impact on healthy development and ageing, including individual factors affecting health and individual resilience to diseases. ▪ Better understanding of specific health and care needs and better solutions for addressing those needs, including specific needs of people in vulnerable stages of life, people with physical or mental impairments, or of population groups with structural socio-economic disadvantages. ▪ Personalised solutions for health promotion and disease prevention of individuals or stratified solutions tailored to groups, including for improved prediction and prevention of diseases before/at birth. ▪ Development of digital tools applications and other solutions, including social innovation, fostering health literacy and empowering citizens to better manage their own health and wellbeing throughout their life course

²⁶ See: [Orientations towards the first Strategic Plan for Horizon Europe](#)

	and to protect them from health threats, including for countering health-related misinformation, manipulation and fraudulent sales of substandard, falsified or inappropriate medicines and illicit drugs.
International Cooperation	Similar health challenges and needs for health promotion and disease prevention are faced by other regions and countries. International cooperation should be sought and promoted in order to benefit from new knowledge and solutions as widely as possible.

Table 1: Horizon Europe (Pillar II), Cluster 1, Staying healthy in a rapidly changing society

Destination	3 Tackling diseases and reducing disease burden
	Research and innovation aim at decreasing the burden of diseases on citizens and health care systems.
Key R&I orientations	<ul style="list-style-type: none"> ▪ Better understanding of diseases, their drivers and consequences, including pain and the causative links between health determinants and diseases, and better evidence-base for policy-making. ▪ Better methodologies and diagnostics that allow timely and accurate diagnosis, identification of personalised treatment options and assessment of health outcomes, including for patients with a rare disease. ▪ Development and validation of effective intervention for better surveillance, prevention, detection, treatment and crisis management of infectious disease threats. ▪ Innovative health technologies developed and tested in clinical practice, including personalised medicine approaches and use of digital tools to optimise clinical workflows. ▪ New and advanced therapies for non-communicable diseases, including rare diseases developed in particular for those without approved options, supported by strategies to make them affordable for the public payer. ▪ Scientific evidence for improved/tailored policies and legal frameworks and to inform major policy initiatives at global level (e.g. WHO Framework Convention on Tobacco Control; UNEA Pollution Implementation Plan).
International Cooperation	Effective international cooperation is essential to reduce disease burden and to protect people against cross-border health threats including the rise and spread of AMR and (re)emerging epidemics . The EU should continue its efforts to initiate and participate in cross-border coordination and integration of research and innovation. To address these challenges of global dimension, it will require international cooperation to pool the best expertise and know-how available worldwide, enable a better alignment with actions in the rest of the world, and contribute to the achievement of SDG 3 'Healthy lives and well-being for all'. This includes international collaboration with major EU and global initiatives in the area of infectious diseases (Global Research Collaboration for Infectious Disease Preparedness, GloPID-R), non-communicable diseases (Global Alliance for Chronic Diseases, GACD), rare diseases (International Rare Diseases Research Consortium, IRDiRC), brain research (International Traumatic Brain Injury Research, InTBiR), personalised medicine (International Consortium for Personalised Medicine, ICPeMed), and -omics64 (e.g. the International Human Epigenome Consortium, IHEC, the 1 Million Genomes Initiative), and global health (World Health Organisation and other UN agencies)

Table 2: Horizon Europe (Pillar II), Cluster 1, Tackling diseases and reducing disease burden

Destination	5 Unlocking the full potential of new tools, technologies and digital solutions for a healthy society
Key R&I orientations	<p>Research and innovation aim at supporting the integration and deployment of innovation in health care systems.</p> <ul style="list-style-type: none"> ▪ New tools and technologies for biomedical research, prevention, diagnosis and therapy of diseases and tools for monitoring diseases as well as treatment progression are designed, developed, tested or validated for the benefit of patients and the health and care systems. These solutions can include a variety of technologies and approaches such as <i>nano medicines, advanced therapies, biomaterials, medical devices, hybrid technologies, digital solutions, Artificial Intelligence applications, robotics, -omics67 and other data-driven interventions and procedures.</i> ▪ Health data accessibility and interoperability across the EU, including the free flow and secure exchange of health data, leaning on existing research infrastructures as well as the creation of a European Health Data Space to promote health-data exchange and support research. ▪ Improved risk-benefit ratio of the developed innovative tools, technologies and approaches owing to powerful digital solutions using and processing big data for better detection, diagnosis and monitoring of disease, including real-world data, for efficient value assessment. ▪ Efficient up-scaling and production systems, including bioprinting, additive manufacturing and other advanced manufacturing techniques, enabling targeted and personalized health interventions. ▪ Improved health technologies and interventions based on digital solutions, which support timely health information and secure use of health data. ▪ New data-driven approaches, computer models and -simulations and other digital solutions are developed, translated and optimised for the prevention, health care and person-centred care, including smart data infrastructures and AI-based data analytics.
International Cooperation	To be negotiated

Table 3: Horizon Europe (Pillar ii), Cluster 1, Unlocking the full potential of new tools, technologies and digital solutions for a healthy society

[!] OPEN/FORTHCOMING CALLS FOR PROPOSALS | To stay up to date on the upcoming calls that will be published within the Cluster Work Programme once the Horizon Europe Program is adopted (starting from January 2021), please monitor the [Funding and Tenders Portal](#).

CLUSTER 4 | Digital, Industry and Space

Bringing together activities on digital, key enabling and space technologies, as well as a sustainable supply of raw materials, will allow for a more systemic approach, and a faster and more profound **digital and industrial transformation**. It will ensure that research and innovation in these areas feed into, and contribute to the implementation of, the EU's policies for industry, digitisation, environment, energy and climate, circular economy, raw and advanced materials and space. Complementarity will be ensured with activities under the **Digital Europe Programme**²⁷, to respect the delineation between both Programmes and avoid any overlaps.

CLUSTER 4. Digital, Industry and Space↗

Reinforcing capacities and securing Europe's sovereignty in key enabling technologies for digitisation and production, and in space technology, to build a competitive, digital, low-carbon and circular industry; ensure a sustainable supply of raw materials; and provide the basis for advances and innovation in all global societal challenges.

- ↗ Manufacturing technologies
- ↗ Digital technologies
- ↗ Advanced materials
- ↗ Artificial intelligence and robotics
- ↗ Next generation internet
- ↗ High performance computing and Big Data
- ↗ Circular industries
- ↗ Low carbon and clean industry
- ↗ Space

Cluster 4 Digital, Industry and Space | Main features of the Cluster:

- The Cluster 4 has a **top-down** approach. Applications can be submitted only in response to the topics identified by the EC.
- Only **collaborative projects** are eligible.
- **[!] International Cooperation:** Activities under this cluster will engage with international partners as appropriate to enhance exchange of know-how, access to international value chains, in areas of mutual benefit and EU interest, and with due consideration to the technological sovereignty/autonomy objective. Particular attention will be paid to Europe's strong position in sustainability, to **promote EU climate-neutral, clean and circular technologies**. Activities will also aim to pursue level playing fields, reciprocity and the development of technologies that put **human rights and social values** first, including through industrial and policy dialogues. Among the domains identified for cooperation: Circular economy and climate-neutral technologies, to support **global sustainability** and European industry, including a harmonised approach to materials life cycle assessment ("circularity by design"); **Common standards and interoperability**, including in the regulatory context of manufacturing technologies, digital technologies and Artificial Intelligence (focussed on ethics and data).

Among the 11 Key R&I orientations identified by the EC proposal for Horizon Europe, five are particularly relevant for Digital Health and AHA and concern **Enabling technologies ensuring European leadership and autonomy**:

²⁷ To find more about the Digital Europe Programme, see the presentation of Annalisa Bagliolo, DG CNECT.D.1 at: https://www.apre.it/media/586540/annalisa_bogliolo.pdf

Key R&I orientation	<p>1 Manufacturing Technologies</p> <p>They are also directly relevant for activities in clusters related to health, energy and mobility. Priorities include:</p> <ul style="list-style-type: none"> ▪ Strengthening and creating value chains based on digital industrial platforms, benefitting the production sectors from automotive and aerospace to health and food processing.
Key R&I orientation	<p>2 Key Digital Technologies</p> <p>They are bringing the benefits of digital innovations, notably through Artificial Intelligence and big data analytics, to all types of products and services from connected and autonomous vehicles to health equipment, novel materials and <i>drugs</i>, and smart energy systems.</p>
Key R&I orientation	<p>3 Advanced Materials</p> <p>The development of advanced materials for innovative medical products and devices directly contributes to the well-being of European citizens. In addition, advanced materials will provide solutions for challenges related to health, and sustainability of building materials contributing to the safety of Europe's citizens.</p>
Key R&I orientation	<p>5 Artificial Intelligence and Robotics</p> <p>They will bring potential benefits to the other clusters, to address global challenges, with direct impacts in sectors such as healthcare, agriculture, manufacturing, energy, transport:</p> <ul style="list-style-type: none"> ▪ The introduction of AI and autonomous behaviour in complex, safety- and time-critical systems, such as those used in large transport networks, avionics, health or industrial applications, is a technological challenge but also a significant business opportunity for which Europe has a competitive advantage. ▪ In this field, Europe also needs to deploy a human-centric, ethical and trustworthy AI, which will be crucial for its acceptance, and a trademark for AI developed in Europe.
Key R&I orientation	<p>7 Advanced Computing and Big Data</p> <p>While the abundance of data is a core element for computing complex problems and solutions, it may conversely create problems, in particular as regards the protection of personal and sensitive data (e.g. commercial data, trade secrets, health data etc.) that need to be protected by privacy preserving technologies respecting the rights of data subjects and content creators. In the same vein, some complex problems can only be computed and solved with a sufficient critical mass of data that may only exist in isolated silos that need to be connected.</p> <ul style="list-style-type: none"> ▪ To ensure that diverse data from different sectors and of different types can be seamlessly combined and exploited across sectorial and national borders, methodologies and tools are needed to ensure interoperability and to keep track of the provenance, quality and completeness of data sets.

Table 4: Horizon Europe (Pillar II), Cluster 4, relevant Key R&I orientations (Digital Health and AHA)

Under the Pillar II are also included EU Missions and most of the EU Partnerships²⁸.

In particular, the Mission “Cancer” and a set of EU Partnerships under the Health and Digital domains are here presented as relevant for Digital Health and AHA within the Horizon Europe programme.

EU MISSION | Cancer

Each year, 2.6 million people in the EU-27 are diagnosed with cancer. This number is expected to increase rapidly because of ageing populations, unhealthy lifestyles and unfavourable environmental conditions. (...) The Mission on Cancer will address the whole cancer control continuum, i.e. from prevention of risk factors to survivorship support and end-of-life care, for all ages and cancers, including rare and poorly understood cancers, cancers in children, adolescents/young adults and the elderly, cancers in socially or economically vulnerable families and among people living in remote areas, across all Member States.

Interim Report of the Mission Board for Cancer (September 2020)

As anticipated, EU Missions include a portfolio of excellence-based and impact-driven R&I actions across disciplines and sectors, intended to:

- achieve, **within a set timeframe**, a measurable goal that could not be achieved through individual actions
- have **impact on society and policy-making** through science and technology
- be **relevant for** a significant part of the European population and a wide range of **European citizens**

Therefore, EU Missions will potentially **combine different funding instruments** and policy actions and will be supported by a range of activities, engaging different actors such as the Member States, and European citizens, as well as the European Commission.

Moreover, each EU Mission encompasses activities from a broad range of TRLs, including lower TRLs, as appropriate to achieving the goal of the mission.

EU BUDGET FOR EU MISSIONS | There is no fixed budget for each of the 5 Missions areas identified by the EC:

- During the **first three years** of the programme, a **maximum of 10%** of the annual budget of **Pillar II** shall be programmed through specific calls for implementing the missions
- For the remaining part of the programme, and **only after a positive assessment** of the mission selection and management process, this percentage may be increased

²⁸ These has been rationalized: from 120 Partnerships in H2020 to 49 Partnerships under Horizon Europe, grouped in three categories (co-programmed; co-funded; institutionalized). 35 partnerships have been candidate to be included in Pillar II; 11 partnership candidates are currently outside pillar II (9 EIT-KICs, SMEs, Open Science Cloud). A new partnership on “European Partnership on (Pandemic) Preparedness and Societal Resilience” is also under discussion to be added to the whole portfolio.

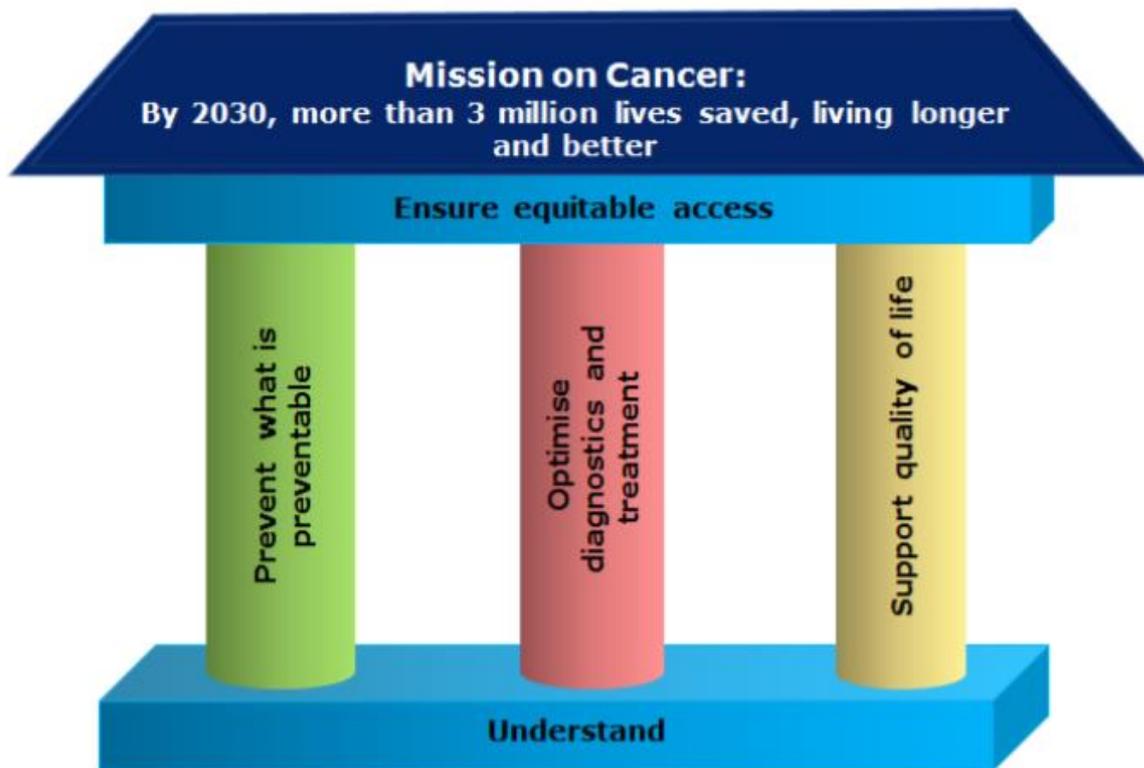


Figure 10: EU Mission "Cancer": structure and objectives (Source: Interim Report of the Mission Board for Cancer: *Proposed Mission: Conquering cancer, mission possible – September 2020*)

The overall goal of the Mission on Cancer has been formulated as: **“By 2030, more than 3 million lives saved, living longer and better”**. This is consistent with UN Sustainable Development Goal (SDG) 3: Ensure healthy lives and promote well-being for all at all ages. The target of this SDG for non-communicable diseases for 2030 is *“to reduce by one third premature mortality through prevention and treatment and promote mental health and well-being.”*

Given the high level of ambition, a comprehensive plan of bold actions supported by all Member States and stakeholders – **including patients, survivors, carers and the wider public** - is required to achieve the Mission’s goal.

Figure 20 illustrates that three main outstanding pillars of interventions are needed to these achievements:

1. **Prevention**
2. **Diagnostics and treatment**
3. **The quality of life of cancer patients, survivors, and their families and carers**

Supported by two transversal priority axes:

4. **Equitable access**
5. **Understanding Cancer**

As such, these areas are considered the main intervention areas of the Mission. All require a thorough understanding of cancers, causal factors and mechanisms, and their impact on cancer; therefore, understanding is considered the basis for actions. Furthermore, effective policy measures are needed and resources should be allocated to ensure that citizens and other stakeholders in all Member States

have equitable access to high-quality prevention, diagnostics and treatment, care and support, including access to research funding and knowledge.

FIND MORE ABOUT | Mission “Cancer”

See the Interim Report of the Mission Board for Cancer (September 2020): [Proposed Mission: Conquering cancer, mission possible](#)

EU PARTNERSHIPS | Transforming Health and Care Systems

This partnership will build on the experience and outcomes of some closely related European initiatives, [such as]:

- **The Active & Assisted Living Programme (AAL Programme)** with a focus on funding R&I projects for new/adapted solutions for older adults and those supporting them, mainly in non-institutional health and care (i.e. at home and in community) by making use of ICT-based/digital technologies; The AAL Programme has extensive experience in involving end-users and different types of stakeholders in the Programme set up, in the call definition, in support actions as well as in funded projects.
- **The Joint Programme Initiative “More Years, Better Lives”** focusing on transdisciplinary policy-directed research and in particular social sciences and behavioural research about the effects of an ageing population on society at large and in particular with regard to the current health and care systems;
- **The European Innovation Partnership on Active & Healthy Ageing** developing tools, know-how and exchanges to stimulate ecosystems at subnational level, public/private investment and scale-up of innovation within regions for the benefit of the whole society²⁹.

European Partnerships provide a framework for programme level collaboration between the Union and public or private partners. Key precondition for launching a partnership is the existence of an agreed **Strategic Research and Innovation Agenda/Roadmap**. Then, the launch of a European Partnership is conditional to partners signing up to those objectives and committing the resources and investments needed from their side to achieve them.

EU PARTNERSHIPS | Main features

- **Initiatives where the EU together with private and/or public partners commit to jointly support the development and implementation of a programme of research and innovation activities.**
- The partners could represent industry, universities, research organisations, bodies with a public service remit at local, regional, national or international level or civil society organisations including foundations and NGOs.
- Partnerships will be supported only if there is evidence that they are more effectively **achieving policy objectives** than Horizon Europe alone
- Unified umbrella branding to improve **visibility**.

²⁹ See: https://ec.europa.eu/info/files/european-partnership-health-and-care-systems-transformation_en

The current portfolio of European Partnerships (Co-funded, Co-programmed, Institutionalized) within Horizon Europe is found in Annex 7 of the [Orientations towards the first Strategic Plan for Horizon Europe](#). Under the title “**Transforming health and care systems**” the candidate Partnership “Large-scale innovation and transformation of health systems in a digital and ageing society” has been redrafted, as a co-funded action.

CO-FUNDED PARTNERSHIP | Main features

Legal form: based on a *Grant Agreement* (programme co-fund action) signed between the Commission (executive agency) and a consortium of beneficiaries such as:

- *Ministries in charge of R&I policy*, and research and innovation and technology funding *agencies* and foundations (national and regional);
- *Ministries in charge of Health and care policy*, and Health and care *agencies* (national and regional).

Implementation: On this legal basis, the Member States design a common programme to be implemented under their responsibility. It pools national funding/resources with co-funding from the Union.

- *Funding rate 30%* (in justified cases higher);
- *Calls and evaluations* are organized centrally, beneficiaries in selected projects are typically funded at national level (on the basis of rules agreed by partners).

As described in the in the *Draft Proposal for a European Partnership under Horizon Europe Transforming health and care systems*³⁰, dating from the 9th of June 2020, in the autumn 2019 the Commission services asked potential partners to further elaborate proposals for the candidate European Partnerships identified during the strategic planning of Horizon Europe. This document that is currently available is a stable draft of this Partnership proposal, released for the purpose of ensuring transparency of information on the current status of preparation.

The core issue that this Partnership is addressing is that health and care systems have been facing increasing challenges. As the draft explains, **COVID-19 pandemic has highlighted that improvements are urgently needed to reach high quality, efficient, accessible, health promoting, people-centred, resilient, health and care systems for all EU citizens**. Research and Innovation activities (R&I) in a EU Partnership will accelerate the transformation towards sustainable health and care systems.

In this perspective, technological development, biomedical innovation and the need to foster implementation research to support the transformation of health and care systems to become more proactive, are considered as important drivers.

³⁰ See: https://ec.europa.eu/info/files/european-partnership-health-and-care-systems-transformation_en. It is to be noted that the “Draft version 1 - July 2020” has not been adopted or endorsed by the European Commission. As such, any views expressed in it are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions.

There is a need for a shift from intervention to prevention approach as a key transformation process, (i.e. by stressing on positive health and well-being for sustaining mental and physical abilities, and promoting the best possible quality of life for the citizens).

Therefore, in order to ensure the transition towards more sustainable, resilient, innovative and high-quality people-centred health and care systems, this Partnership will be organised around the following specific objectives to be achieved by 2030:

EU PARTNERSHIP “TRANSFORMING HEALTH AND CARE SYSTEMS”	
Vision	To lay the ground to provide high-quality health and care services at affordable prices to all European citizens in a way that is sustainable for the public finances
Specific Objectives	<ul style="list-style-type: none"> To provide multidisciplinary research and innovation actions in priority areas of common interest to fill knowledge gaps, produce evidence and develop guidance on how to transform health and care systems. To provide applied research/development and innovation actions in priority areas of common interest to develop new solutions for health and care to support and maintain people’s health To strengthen the research and innovation community in the field of health and care systems across Europe To improve the ability of relevant health and care actors to take up innovative solutions, including organisational, service and policy innovations To establish a platform for connection and coordination of relevant stakeholders to develop the ecosystems allowing for a swift scaling up and transfer of successful innovations to different health and care systems

The funding of health and care system R&I is complicated and multidimensional when it comes to sectors and actors involved, end users, expected impacts, and legal regulations of the R&I. This partnership will present an opportunity to bring together policy makers, funders, researchers and all stakeholders of the health and care ecosystem.

By aligning research and innovation funding through the SRIA – Strategic Research and Innovation Agenda and coordinating with non- research and innovation activities, **resources will focus on those priority areas where joint learning has greatest added value ensuring the knowledge translation needed to best support decision making at services and system level.**

Therefore, the stakeholders and actors that are considered as relevant for this Partnership can be classified as:

- Partners needed to build up the Partnership (national policy makers and the EC)
- **Stakeholders that provide inputs through consultation for priority setting (e.g. final users, care providers, etc.)**
- Final Beneficiaries of the Partnership implementation (R&I community as a whole)

Here follows an overview of the activities to be funded under this Partnership:

Type of action	EU PARTNERSHIP Transforming Health and Care Systems
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<p><i>Funding to Research and Innovation (R&I)</i></p>	<ul style="list-style-type: none"> ▪ The <i>national contributions</i> from countries participating in the call budgets are expected to range from the order of 100K€ up to several Million Euros per country and call. ▪ Calls will address different categories and different stages of the R&I chain from research and innovation action in the field of health services and systems research, to experimental development, e.g. pilots, living labs, etc. This will envisage different sources of national funding to increase the capacity and to create synergetic effects. ▪ The organization of calls is planned to be divided into different pillars depending on TRL levels and the ability to directly co-fund through the suitable funding schemes of Member States and Associated Countries.
<p><i>Support actions</i></p>	<p>The Partnership will support additional relevant actions aiming at:</p> <ul style="list-style-type: none"> ▪ Increasing the cross-project cooperation; ▪ Enhancing the transnational networking among relevant actors of the health and care ecosystems; ▪ Implementing training and mobility actions, awareness raising, communication, dissemination and exploitation.
<p><i>Support to the Governance structure</i></p>	<p>A governance and related management structure shall be set-up and maintained to coordinate and manage the internal and external management of the Partnership both at strategic and also operational level:</p> <ul style="list-style-type: none"> ▪ decision-making process; ▪ development of the annual work plans; ▪ daily partnership implementation and management etc. (see governance).
<p><i>Efforts for national coordination</i></p>	<p>National coordination includes all activities for ensuring:</p> <ul style="list-style-type: none"> ▪ the mobilisation of relevant stakeholders at country level, local/national promotion of the project calls; ▪ strengthening impact creation and implementation of results at national/regional/local level; ▪ alignment with national and regional strategies and priorities.

Table 5: EU PARTNERSHIP | Transforming Health and Care Systems

COST | European Cooperation in Science and Technology

About

COST | About



European Cooperation in Science and Technology (COST) is the longest-running European framework for research and innovation. For over 45 years, it has offered European researchers and innovators, a simple and flexible pathway to take part in the best science and technology networks in Europe

and across the world. COST is, therefore, a funding organisation for the creation of research networks, called **COST Actions**. These **networks** offer an open space for collaboration among scientists across Europe (and beyond) and thereby give impetus to research advancements and innovation.

Since 1971, COST receives EU funding under the various research and innovation framework programmes, such as Horizon 2020.



COST funding intends to complement national research funds, as they are exclusively dedicated to cover collaboration activities, such as *workshops, conferences, working group meetings, training schools, short-term scientific missions, and dissemination and communication activities.*

Actions are multi-stakeholder, often involving the private sector, policymakers as well as civil society.



COST | Main features

- COST is **bottom up**, this means that researchers can create a **network** – based on their own research interests and ideas – by submitting a proposal to the COST Open Call. *The proposal can be in any science field.* COST Actions are highly interdisciplinary and open.
- It is possible to **join on-going Actions**, which therefore keep expanding over the funding period of four years.

Participation features

COST | Participation features

Participants are invited to submit COST Action proposals contributing to the scientific, technological, economic, cultural or societal knowledge advancement and development of Europe. Multi- and interdisciplinary proposals are encouraged.

The **Open Call Action** proposal submission, evaluation, selection and approval (**SESA**) procedure is **fully science and technology-driven** and will ensure a simple, transparent and competitive proposal evaluation and selection process, reflecting the bottom-up, open and inclusive principles of COST.

Participants planning to submit a proposal for a COST Action will need to refer to the SESA guidelines and to the Open Call Announcement on the Documents and Guidelines [page](#).

Funding Schemes

COST | *Funding Schemes*

Check [here](#) the next date for Proposals collection.

Programme	COST European Cooperation in Science and Technology
Objectives	COST creates spaces where scientists are in the driving seat (bottom-up) and ideas can grow through a flexible and open approach. By enabling researchers from academia, industry and the public and private sector to work together in open networks that transcend borders, COST helps to advance science, stimulates knowledge sharing and pools resources .
Eligibility criteria	<p>A COST Action is open to all:</p> <ul style="list-style-type: none"> ▪ science and technology fields (including trans-, and interdisciplinary, new and emerging fields); ▪ institutions (academia, public institutions, SME/industry, NGO, European/international organisations, etc.); ▪ career stages (both young and experienced); ▪ COST Members <p>All the rules for participation in and implementation of COST activities are available here.</p>
Eligibility criteria for EU/Third Countries	<p>Non-COST Members are spread across the Near-Neighbour Countries and International Partner Countries and can join on the basis of mutual benefit.</p> <p>All the rules for participation in and implementation of COST activities are available here.</p>
Official Sources	https://www.cost.eu/
Notes	<p>For more information, applicants can:</p> <ul style="list-style-type: none"> - Consult “how to apply” - Consult the Open Call Announcement - Consult the Documents and Guidelines page - Contact opencall@cost.eu

Table 6: COST | European Cooperation in Science and Technology (main features)

EU4HEALTH Programme

About

From the EU Health Programme to EU4HEALTH Programme

The [Health Programme](#) is the major funding instrument that has been managed by DG SANTE in cooperation with CHAFEA (Consumers, Health, Agriculture and Food Executive Agency). In line with the Europe 2020 strategy, it has outlined the strategy for ensuring good health and healthcare in the EU, providing funding to projects on **health promotion, health security and health information**.

The currently phasing out 3rd Health Program (2014-2020) serves four specific objectives (€449.4 million budget). The Health Program has four main pillars:

- Promote health, prevent disease and foster healthy lifestyles through 'health in all policies',
- Protect EU citizens from serious cross-border health threats
- Contribute to innovative, efficient and sustainable health systems
- Facilitate access to high quality, safe healthcare for EU citizens

Within these areas, 17 topics were called for in 2020 including major diseases, HTA to reference networks and evidence-based decision making³¹.

The EU Health Program | It has been implemented by means of **annual work programmes** arranged with EU countries on a number of annually defined priority actions as well as the criteria for **funding actions** under the program. On this basis, CHAFEA organises calls for proposals for projects and operating grants, as well as calls for joint action and tenders. Direct grants are signed with international organisations active in the area of health. The proposals are evaluated by the CHAFEA and assisted by external experts. The latter are selected through [calls for expression of interest](#).

Funding mechanism: the type of funding available for each action is set out each year in the work plan. Unless indicated otherwise (e.g. tenders), the basic principle is joint funding, with Commission grants covering a certain percentage of overall costs.

- According to the guidelines of CHAFEA, there are two main [funding mechanisms](#): grants (grants for projects, operating grants, direct grants with international organisations and grants to EU authorities and bodies for co-financed actions, called *joint actions*) and [tenders](#).

For the 2021-2027 period, the next MFF – Multiannual Financial Framework has incorporated the Health Program in the European Social Fund+. The Commission is proposing a total budget of €101 billion for the EFS+, as a result of a merging of the existing European Social Fund, the Youth Employment Initiative (YEI), the Fund for Aid to the Most Deprived (FEAD), the EU Programme for Employment and Social Innovation (EaSI) and the EU Health programme.

³¹https://ec.europa.eu/chafea/health/bookshelf/legal-documents/documents/awp-2020-annexes-summary_en.pdf

EU4HEALTH | A programme in response to the global pandemic

The EU4Health | represents the EU's response to COVID-19 that impactfully rampaged the economy, society and the healthcare systems worldwide. By investing €9.4 billion, it is the largest to be health programme in monetary terms. The program will release its funds for applications in 2021 to EU countries, health organisations and NGOs.

The EU4Health programme has three *general objectives*:

- protecting people in the EU from serious cross-border health threats and **improving crisis management capacity**;
- making medicines, medical devices and other crisis relevant **products, available and affordable** and supporting **innovation**;
- **strengthen health systems and the health care workforce**, including by investing in public health, for instance through health promotion and disease prevention programmes and improving access to healthcare.

Participation features

EU4HEALTH | Participation features

Different types of *actions can be funded* in future in the different areas covered by the programme and allow to identify the types of **potentially eligible participants**. These actions include but are not limited to:



- **Country-specific tailor-made support and advice** to countries, or groups of countries, with the highest needs, through twinning, expert advice and peer support, etc;
- **Training and exchange programmes for medical and healthcare staff**;
- New mechanisms for instance for procurement of goods and services necessary for the **prevention and management of health crises**;
- **Audits**, e.g. of Member States preparedness and response arrangements (such as crisis management, antimicrobial resistance, vaccination) to ensure their effectiveness;
- **Clinical trials** to speed up the development, authorisation and access to innovative, safe and effective medicines and vaccines;
- **Cross-border collaboration and partnerships, including in cross-border regions, with a view to transferring and up scaling innovative solutions, including digital, for instance through the European Reference Networks (ERNs)**;
- Setting up and coordination of **Union Reference Laboratories and Centres of Excellence**;
- Investment in precursory projects for high-value-added initiatives and in **critical health infrastructure**;
- Deployment, operation and maintenance of **digital service infrastructure**;
- **Analytical activities** such as studies, data collection and benchmarking.

Funding Schemes

EU4HEALTH | Funding Schemes

There will be a significant focus on action in the early years of the programme, in particular on **crisis management**. A full list of possible actions can be found in Annex I of the [EU4Health proposal](#).



Beyond crisis preparedness and response, the EU4Health Programme will address other important long-term challenges for health systems, in particular:

- **inequalities in health status among population groups**, countries and regions, and access to affordable, preventive and curative health care of good quality;
- **burden from non-communicable diseases**, in particular cancer, mental health, rare diseases and risks from health determinants;
- uneven distribution of health care systems capacity;
- **obstacles to the wide uptake and best use of digital innovations as well their scaling up**;
- growing health burden from environmental degradation and pollution, in particular air, water and soil quality, and also from demographic changes.

FIND MORE ABOUT | EU4HEALTH Programme

- To stay up to date and know more about the EU4HEALTH Programme, visit https://ec.europa.eu/health/funding/eu4health_en

Interreg Europe

About

INTERREG EUROPE | About



The [INTERREG EUROPE](#) interregional cooperation programme covers all EU-27 Member States, plus Norway and Switzerland, under the European Territorial Cooperation goal co-funded by the European Regional

Development Fund (ERDF). It follows on from the INTERREG IVC programme. **In the period 2014-20, its main goal is to improve regional development policies through exchanges of experiences and good practice.** It also aims to capitalise on regional know-how and good practices already identified at the European level.

INTERREG EUROPE | Main features

- The programme provides co-financing for regional and local institutions, such as public administrations, regional development agencies, educational institutions and others, to create

networks and exchange experiences on different themes, thus generating good regional practice at the European level.

- Some more experienced networks aim to use previously identified good practices in order to impact positively on their region's immediate development in the given field (capitalisation).

INTERREG EUROPE focuses on four topics³²:

- Research, technological development and innovation
- Competitiveness of SMEs
- Low carbon economy
- Environment and resource efficiency.

With a budget of EUR 359 million from the ERDF, it finances *two types of actions*:

- **Cooperation projects** are opportunities for organisations from different countries to work together for 3 to 5 years and exchange good practices on particular policy issues.
- **Policy learning platforms** are spaces for continuous learning which organisations dealing with regional development in Europe can access.

At the start of the 2021-2027 programming period, Europe faces an unprecedented situation of health crisis due to the COVID-19 pandemic which took hold in spring 2020. It is set to have very severe and long-lasting effects on many economic sectors (e.g. cultural and creative sector) and probably on other aspects like use of transport modes, consumer habits, way of life, etc. in Europe's regions. The challenges arising from this health crisis will be taken into account, next to the ecological transition, the digital transitions and the demographic change that remain crucial issues to be addressed by the EU over the next decades. All these challenges will have strong impacts on a wide range of policy fields at EU, national, regional and local level. Overall, public policies will undoubtedly need to support the capacity of the European economy and society to recover on the way out of the crisis.



Regarding the period 2021-2027, the overall objective set by the Interreg Programme is to **improve the implementation of regional development policies, including Investment for jobs and growth goal programmes**, by promoting the exchange of experiences, innovative approaches and capacity building in relation to the **identification, dissemination and transfer of good practices among**

regional policy actors.

Users associations – through their advocacy activities and dialogue with policy makers – may represent key-actors in the projects funded by this Programme. **Care Providers** – as final users of Health policies – may be also significant interlocutors and, therefore, partners of regional policy actors.



In addition, “*a better cooperation governance*”³³ was established as a single programme specific objective.

³² https://ec.europa.eu/regional_policy/en/policy/what/glossary/i/interreg-europe

³³ Draft European Territorial Cooperation (ETC), Art. 14 and 15

This Interreg-specific objective enables Interreg programmes to support actions to enhance the institutional capacity of public authorities and relevant stakeholders involved in managing specific territories and implementing territorial strategies. The choice for the **Interreg-specific objective** is based on the following considerations:

- It reflects the focus of the Interreg Europe programme on the exchange of experiences and capacity building among regional policy actors to improve their capacity for the design, management and implementation of their regional development policies. This focus on *capacity building* fits perfectly the definition of the Interreg-specific objective on governance.
- It is in line with the type of results that can be expected from the Interreg Europe programme, which are *increased capacities of regional policy actors* and improvements in the (implementation of) regional policy instruments.
- It does justice to the diversity of regional policy challenges across the European territory. Under the umbrella of the Interreg-specific objective, regional policy actors can work together on all policy issues of shared relevance in line with their regional needs, as long as this falls within the thematic scope of cohesion policy.
- It offers the programme a certain *flexibility* to adapt to emerging policy developments - again, within the broader thematic scope of cohesion policy.

INTERREG EUROPE | What is offering

Many regions are reviewing their European activity in the context of budget pressures. Interreg Europe 2014-2020 can help your city and/or region in the following ways:

- **Financial support** – funding is available for interregional cooperation projects, which have the potential to lead to longer term collaborations and partnerships (up to 85%)
- **Peer learning** – gain insights and experience from a range of exchange and learning opportunities with your peers across Europe
- **Expert advice and skills** – these can be solicited through policy platform personnel and your country representatives
- **Policy into practice** – make a tangible difference by translating EU policy into on the ground action
- **Bottom-up policy development** – by using the results and positive impact of your successful projects to serve as evidence for feeding into EU and national policies
- **Save time** – rather than reinventing the wheel, find out what solutions to sustainable development challenges already exist in other parts of Europe. A problem shared, is a problem solved
- **Organisational and professional development** – bring collaborative learnings back home for the benefit of you, your organisation and those you serve
- **Expand your network** – meet new like-minded partners, stakeholders and business friends across Europe
- **Build an international profile** – among your project peers and with the EU institutions
- **Make people happy!** Your citizens and communities are relying on you to make their city/region a place of economic, social and environmental progress and possibility.

During 2021-2027 programme timeline, in order to strike a balance between the need to accommodate interregional cooperation on a broad range of policy issues and the need for thematic concentration, the programme will concentrate the **largest share of the programme budget (80%) on a selection of 12 specific objectives**. The remaining 20% of the programme budget can be allocated to



the other [specific objectives of cohesion policy](#). They may be subject to modifications during the programming period according to the internal rules or procedures defined by the Monitoring Committee.

This selection underlines the continued importance of the policy objectives of Smarter Europe and Greener Europe, which represent **topics that were also at the heart of the Interreg Europe 2014-2020 programme**. At the same time this selection also reflects the emerging urgency at the time of programme development of addressing new fields of regional policy in light of the impact of the Covid-19 pandemic, in particular related to **labour market** and **health care challenges** under the *More Social Europe* objective.

Participation features

INTERREG EUROPE | Participation features

The programme 2014-2020 finances two types of action:

- **Interregional cooperation projects:** partnerships made up of relevant policy organisations from different countries in Europe work together for 3 to 5 years to exchange their experiences on a particular policy issue. Each region involved in the cooperation project produces an action plan, specifying what will be done in the region to ensure that the lessons learnt from the cooperation project are put into action. Projects are also required to monitor the progress of their action plans, to determine the impact of cooperation. Calls for project proposals are launched throughout the programming period.
- **Policy Learning Platform:** a space for continuous learning where any organisation dealing with regional development policies in Europe can find solutions and request expert support to improve the way they manage and implement their public policies in the four topics listed above.

These operational elements at programme level are applicable to all the specific objectives supported by the programme.

FIND MORE ABOUT | Eligibility for participation in INTERREG EUROPE

- Adding to the above, third countries cannot take part directly in the Interreg Europe programme - countries other than the EU27, Norway, Switzerland and the United Kingdom. **Organisations from third countries can be partners in an Interreg Europe project. However, they cannot be beneficiaries of ERDF funds.**
- For more info, see at this [link](#).

Interreg Europe aims at improving the implementation of regional policies, with a particular focus on the Investment for Growth and Jobs and European Territorial Cooperation programmes. **The programme is primarily for organisations responsible for regional policies and organisations in charge of Structural Funds programmes.** For the period 2021-2027 and as specified in the overall objective above, Interreg Europe targets **regional policy actors**.

This target group includes national, regional and local authorities as well as other relevant bodies responsible for the definition and implementation of regional development policies. The composition of this target group is quite diverse, reflecting the diversity in institutional and geographical conditions in the Partner States.

As a **general rule** the beneficiaries of the programme are public bodies and bodies governed by public law. Moreover:

- **Private non-profit bodies** may also be beneficiaries under certain conditions (see also Section 2 of this document). Detailed provisions will be outlined in the programme manual.
- **Private companies**, especially SMEs, are an important target group in the context of several supported specific objectives and when relevant they are encouraged to participate in the activities of Interreg Europe actions and benefit from the exchange of experience, although they cannot directly receive EU funding as a beneficiary.

Funding Schemes

INTERREG EUROPE | *Funding Schemes*

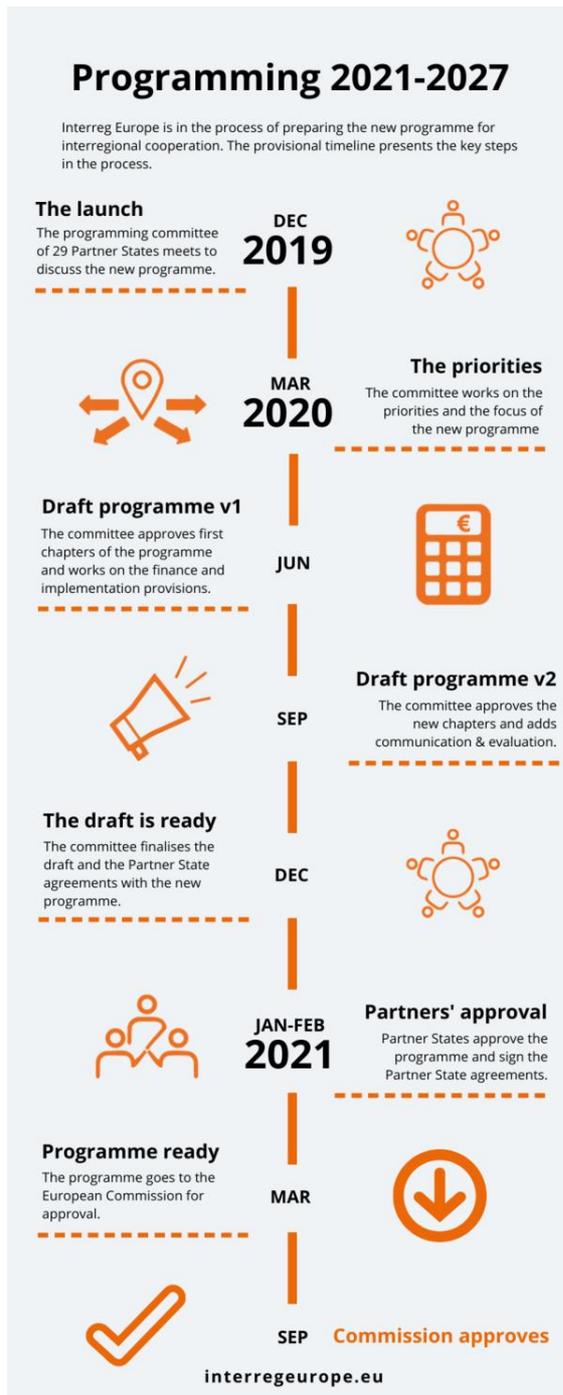
As already mentioned above, Interreg Europe programme has an ERDF (European Regional Development Fund) budget of EUR 359 million for the 2014-2020 period.

ERDF is the main EU Structural and Investment Fund used to support economic development in countries and regions across Europe. Together with the European Social Fund (ESF) and the Cohesion Fund, the ERDF accounts for over one third of the EU budget. ERDF is one of the main financial instruments of the EU's cohesion policy. Its purpose is to contribute to reducing disparities between the levels of development of European regions and to reduce the backwardness of the least favoured regions. Particular attention is paid to regions which suffer from severe and permanent natural or demographic handicaps, such as the northernmost regions with very low population density as well as island, cross-border and mountain regions.

As the ERDF contributes to the Europe 2020 Strategy for smart, sustainable and inclusive growth, it has to focus on the priorities specified in this strategy. The main priorities are:

- Research and innovation;
- Information and communication technologies (ICT);
- Small and medium-sized enterprises (SMEs);
- Promotion of a low-carbon economy.

The level of concentration required varies according to the category of regions being supported. *More developed regions* have to allocate at least 80% of their ERDF resources to at least two of these priorities and at least 20% to the low-carbon economy. *Transition regions* have to allocate at least 60% of their ERDF resources to at least two of these priorities and at least 15% to the low-carbon economy. *Less developed regions* have to allocate at least 50% of their ERDF resources to at least two of these priorities and at least 12% to the low-carbon economy.



At the time that the current guide is being developed, Interreg Europe 2014-2020 has allocated all available funds to projects. As a result, **no call is currently open or will open in the future**³⁴.

Funding for Interreg Europe projects was allocated through calls for project proposals – periods of time during the year when applications could be submitted. Each call had an opening and closing date and outside of these dates it was not possible to apply for funding with a project proposal. Applications were submitted online through the Interreg Europe online system (iOLF). The system was available shortly before the call opened, so that applicants could register and start preparing their applications. The ‘Submit application’ button, however, was active only during an open call. Specific terms of reference were published for each call. They defined specific criteria for each call, for example the maximum amount of funding available, the topics opened for funding and so on.

For the next long-term EU budget 2021-2027, regional development investments will strongly focus on objectives 1 and 2. 65% to 85% of ERDF and Cohesion Fund resources will be allocated to these priorities, depending on Member States’ relative wealth.

- **Smarter Europe**, through innovation, digitisation, economic transformation and support to small and medium-sized businesses
- a **Greener, carbon free Europe**, implementing the Paris Agreement and investing in energy transition, renewables and the fight against climate change
- a more **Connected Europe**, with strategic

- transport and digital networks
- a more **Social Europe**, delivering on the European Pillar of Social Rights and supporting quality employment, education, skills, *social inclusion and equal access to healthcare*
- a **Europe closer to citizens**, by supporting locally-led development strategies and sustainable urban development across the EU.

³⁴ <https://www.interregeurope.eu/projects/apply-for-funding/>



To steer the overall process, take formal decisions on the content of the future programme and select the thematic priorities the new programming committee has been set up. The committee is made of delegates from 29 Partner States who take the decisions. An observer from the European Commission as well as the programme's managing authority and joint secretariat take part, but without any decision-making powers. External experts have been also assigned to assist towards drafting the new programme.

On June 10, 2020, the third programming committee meeting has been held online because of the COVID-19 crisis. Representatives of 30 Partner States came together to discuss in parallel with the EU-level negotiations on the budgetary and regulatory framework. On the agenda, there were the presentation and preliminary approval of version 1 of the draft cooperation programme, and the first inputs on version 2.

[!] Stay up to date at the official [Interreg Europe website](#).

Digital Health for AHA in Canada: policy priorities and programmes

About

Canadian programmes / About

Opportunities for international cooperation under the framework of Canadian programmes are listed below in relation with the funding agencies.



1. [National Research Council Canada \(NRC\)](#) - [Industrial Research Assistance Program \(IRAP\)](#) | [NRC international programs](#) connect companies with the funding, advisory, export, and innovation services they need to access new markets and global value chains.

2. [National Research Council Canada \(NRC\)](#) | [EUREKA international network](#) is an international network for market-driven industrial R&D that includes 45 economies from Europe and across the globe. Through Canada's associate membership in EUREKA, Canadian innovators have a new advantage in accessing technology, expertise, and markets in Europe and beyond. **The National Research Council Canada (NRC) is the national contact point for EUREKA.** EUREKA has been operating successfully since 1985 supporting market-oriented R&D and innovation projects in all technology sectors. Initially a European intergovernmental network, EUREKA has expanded beyond Europe to include Israel, Turkey, South Korea, South Africa, Chile, Argentina and Canada. To date, EUREKA has resulted in 7,100+ projects, 42.6+ billion euro public-private funding invested, 33,200+ participants including 14,900 SMEs.

3. [Canadian Institutes of Health Research \(CIHR\)](#) | [CIHR Project Grant Program](#) is designed to capture ideas with the greatest potential to advance health-related fundamental or applied knowledge, health research,



Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

health care, health systems, and/or health outcomes. It supports projects or programs of research proposed and conducted by individual researchers or groups of researchers in all areas of health. Note that international collaborators may apply, please see eligibility section for further information.

4. [Canadian Institutes of Health Research \(CIHR\)](#) | [CIHR International and Global Health Collaborations](#) . CIHR seek to lead, stimulate and facilitate effective Canadian international involvement in health research that benefits Canadians and the global community.



5. [The Canada Research Coordinating Committee \(CRCC\)](#) | [CRCC](#) plays an important role in reinvigorating Canada's support for science to meet the current and future needs of the country's scientists, scholars and students. The committee was created to improve the coordination efforts of Canada's

granting agencies—the Social Sciences and Humanities Research Council of Canada, the Natural Sciences and Engineering Research Council of Canada, and the Canadian Institutes of Health Research—as well as the Canada Foundation for Innovation.



Fonds Nouvelles frontières en recherche
New Frontiers in Research Fund

The [Canada Research Coordinating Committee](#) designed the [Government of Canada New Frontiers in Research Fund \(NFRF\)](#) following a comprehensive [national consultation](#), which involved Canadian researchers, research administrators, stakeholders

and the public. NFRF is administered by the Tri-agency Institutional Programs Secretariat, which is housed within the [Social Sciences and Humanities Research Council \(SSHRC\)](#), on behalf of Canada's three research granting agencies: the [Canadian Institutes of Health Research](#), the [Natural Sciences and Engineering Research Council](#) and SSHRC.

NFRF will invest \$275 million over the next 5 years beginning in fiscal 2018-19, and \$65 million ongoing, to fund international, interdisciplinary, fast-breaking and high-risk research.

Funding Programmes and participation supporting International Cooperation in the field Digital Health for AHA

Among the funding opportunities offered by the Canadian agencies, 2 programmes may be particularly featured as opportunities for international stakeholders:

- [CIHR Project Grant](#)
- [New Frontiers in Research Fund – International Stream](#)

CIHR | Participation features

PROJECT GRANT PROGRAMME | CIHR

CIHR'S Project Grant program is designed to capture ideas with the greatest potential to advance health-related fundamental or applied knowledge, health research, health care, health systems, and/or health outcomes. It supports projects or programs of research proposed and conducted by **individual researchers or groups of researchers in all areas of health.**

CIHR invests approximately \$1 billion each year to support health research. The **CIHR Project Grant** competition makes up more than half of this funding

[!] CIHR Project Grant **eligibility** rules can be found [here](#).

NFRF | Participation features

INTERNATIONAL STREAM | NFRF - New Frontiers in Research Fund

[New Frontiers in Research Fund](#) is administered by the Tri-agency Institutional Programs Secretariat, which is housed within the [Social Sciences and Humanities Research Council \(SSHRC\)](#), on behalf of Canada's three research granting agencies: the [Canadian Institutes of Health Research](#), the [Natural Sciences and Engineering Research Council](#) and SSHRC.



The International stream aims to support international collaborations and **position Canada and Canadian researchers as strategic partners at the international level.** The International stream **[!]** ncludes two mechanisms:

- Joint funding calls with international agencies on topics of international relevance
- A dedicated fund to support participation of Canadian researchers within international teams in projects seeking funding from major global platforms.



[!] **Eligibility** requirements may vary. See eligibility for programs [here](#)

Digital Health for AHA in China: policy priorities and programmes

About

Chinese funding programmes | About

At the Chinese national level, it is relevant to highlight two of the main agencies that are part of the national STI system - NSFC and the MoST. Although these agencies include several research fields, there is a strong focus on health-related areas, including programmes and schemes that are managed under these two institutions. In addition, these agencies have established cooperation agreements with the EU and the EC, supporting the development of partnerships and new joint projects.

Funding Programmes and participation supporting International Cooperation in the field Digital Health for AHA



国家自然科学基金委员会
National Natural Science Foundation of China

The NSFC was established on February 14, 1986. It is an institution directly under the jurisdiction of the State Council, tasked

with the administration of the National Natural Science Fund from the Central Government.³⁵ It is China's largest fund for supporting basic research and applied research in natural sciences, particularly in the fields of physics and mathematics; chemistry; life sciences; earth sciences; engineering and materials; information sciences; and management sciences. In NSFC, the department of life science funds a broad-spectrum including biology, agricultural sciences and basic medicine, which extends to various fields of resources, environment, ecology, population and health. Moreover, the department of health science supports basic research on issues concerned with disease prevention, disease control and disease treatment in China.



The CFM call administration agency (China S&T Exchange Centre) organise evaluation according to its relevant procedures and criteria. **Those selected by Horizon 2020 may not finally be co-funded by the CFM** Project proposals should be submitted online **via the applicants' affiliated S&T entities** - that is provincial or municipal S&T Departments (Commissions, Bureaus) etc., departments or bureaus of the ministries of the State Council. These will forward them to CSTEC.

[!] **Eligibility** requirements may vary. See guide to programs [here](#)



³⁵ <http://www.nsf.gov.cn/nsfc/cen/xmzn/2019xmzn/01/08yx/index.html>



MoST is a ministry of the Chinese government

which coordinates science and technology activities in the country. MoST is the major funding agency of the central government that supports several national level science and technology programmes. MOST plans for major national S&T projects and oversee their implementation, coordinates the R&D and innovation of key generic technologies and cutting-edge technologies. The health-related programmes are related with other funding opportunities under National S&T Major Projects - Key New Drug Innovation and Prevention and treatment of major infectious diseases, governed by MoST.



China participation in EU framework programmes vary depending on the themes indicated as flagships with international agencies on topics of international relevance. The joint funding calls underlying the co-funding mechanism can support Chinese participants after a second evaluation through application to MOST

[!] Eligibility requirements may vary. See eligibility for Chinese programs [here](#) and [here](#) for EU -China calls and news



Digital Health for AHA in Japan: policy priorities and programmes

About

Japanese funding programmes /About

Japanese government, as the collaborative project of multiple ministries, has been leading a Data-Health Project - [Data Health Reform Promotion Head Quarter \(MHLW\)](#) - that creates the fundamental base for all R&I to solve the issues and problems of its rapid ageing. Various national EHR including reimbursement data, health examination data, and long-term care insurance data could be connected and available for R&I from 2020 on step by step. Prescription data and other patient data are planned to be available for the patients review. For example, the efficiency and effectiveness of annual health check-up (almost all Japanese have comprehensive check-ups every year from their childhood through), vaccination, and other preventive care could be evaluated and planned better. The data could be utilized also for the precise outcome research by cross-checking the data across medical institutions such as hospitals and clinics, rehab-centres, and nursing-care facilities.

*If integrated, individual's data (both medical-care and long-term-care data) could be connected and created to be carried portably, realizing indeed, a **patient-centred integrated care**. The data will also be planned to be available for R&I and new business creation in private business sectors and, of course, for international cooperation and collaboration.*

The major challenges to overcome related to Data-Health Project are, for example, the cost of implementation, and **security issues**, not only technology issues but also how to get trusted by patients and medical professionals. **The solutions are to be searched not only nationally but also internationally.**

Funding Programmes and participation supporting International Cooperation in the field Digital Health for AHA

Since Japan has comparatively highly regulated and more socialized healthcare and long-term care system with rigid price control, all the players in this field tend to focus their R&D effort along on policy trend, that is, in line with government strategies and policies. This situation creates the reliance on public funds even among the private sectors in Japan.

Japanese Funding Agencies in this field are mainly:

JSPS - Japan Society for the promotion of Science: it provides grant to researchers for their own-picked research topics free from the national strategies.



JST - Japan Science and Technology Agency : It is promoting fundamentally basic research focused on life science, and NEDO (New Energy and Technology Development Organization) is focusing on the industrial engineering research. Besides these, each Ministry has its own research fund.

AMED has been working with these agencies mostly about the research result that might be applicable to the medical/healthcare field:



AMED - Japan Agency for Medical research and Development: it is the fund allocation agency to promote R&I in medical field, based on the strategy set by the government, from basics stages through practical use by utilizing the seeds created by the all Japan grant-in-aid researches. AMED has a comparatively large fund that integrates the budget of each Ministry.

[!] PLEASE NOTE | Current funding opportunities

The distribution of all the public R&I fund is principally done by open-call and review. Since the budget should be passed the parliament every year, the open call must wait for the budget passing every year and most of all the research publicly funded should be completed within specific fiscal year. Because of this political procedure, the public offering of funds from the next year (2021) onward is still not officially defined.



- Japanese fiscal year starts in April and finish in March. If there's no major social or political issue, the budget for 2021 will be set from November 2020 to January 2021, and then recruit/application for research grant for 2021 will start after that timeline

Japanese public fund is principally provided for the domestic research groups the same as in most other countries including EU.

Foreign researcher and/or research groups could be invited depending on the purpose and nature of the research.

[!] TIP | It's recommended for foreign groups to **pre-identify** Japanese collaborators and/or co-operators as strategic partners.

Digital Health for AHA in South Korea: policy priorities and programmes

About

South Korean funding programmes | About

Looking at the following topics considered as strategic for AHA36, several initiatives have been identified below as key references in the R&I landscape of South Korea and often represent opportunities for international cooperation.

Though each country/region brings its territory's economic, cultural and societal aspects in consideration to strategize differentiated methods and adopt technologies for digital solutions to foster healthy and active ageing, international collaboration is needed to create common standards on data, regulation of technologies, and research. Moreover, **players must take advantage of the synergy created by the independent and connected living technologies overlapping with the technologies under preventative care, integrated care, and inclusive living.** Increasing international cooperation in the field of digital health will help to further harmonize common priorities, enhance peer-to-peer learning and allow to better understand local discrepancies and thus explore synergies and complementarities.

PREVENTIVE CARE³⁷

- The [Centre for Disease Control and Prevention \(KCDC\)](#) - Chronic Disease Management Research & Development, commenced to develop disease prevention and management technologies in preparation for an aging population. It coordinates investigation and analysis on the risk factors of chronic diseases to manage *dementia, respiratory allergic diseases, and chronic diseases* such as cardio-cerebrovascular diseases, diabetes, and chronic obstructive pulmonary diseases.



The expected Results are:

- **Research on cardiovascular diseases:** a follow-up study on the population of the elderly in urban and rural areas and producing evidential data for prevention and management of diseases from which many aged people are suffering including cardiovascular diseases. In addition, a forward-looking follow-up study on patients with heart failure and acute heart failure in order to produce evidential data for secondary prevention and management of cardiovascular diseases.
- **Research on diabetes and obesity:** to prevent diseases in the early stages, using early diagnosis factors of obesity, diabetes, and complications; a foundation for translational and clinical researches and production of scientific data for the prevention of metabolic diseases by developing target substances preventing such diseases and using clinical and genetic information.
- **Research on respiratory and allergic diseases:** developing biomarkers and conducting research on preventive and interventional technology.

³⁶ Within the framework of IDIH project.

³⁷ See at: <http://www.cdc.go.kr/contents.es?mid=a30301030000>

INTEGRATED CARE³⁸

- **ETRI - Electronics and Telecommunications Research Institute:** Founded in 1976, ETRI is committed to contributing to the nation's economic and social development through **research, development and distribution of industrial core technologies in the field of Information, Communications, Electronics, Broadcasting and Convergence technologies.**

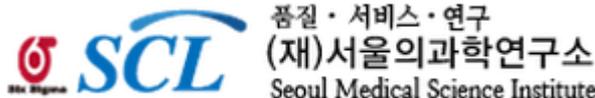


Its action in the R&D panorama responds to four main management principles:

- Prepare for future growth by vitalizing creative and challenging research;
- Generate excellent top-tier R&D performance;
- Resolve the living issues of the public and expand support for SMEs;
- Establish a research culture that is rooted in openness, sharing, and cooperation.

Also, thanks to its Global R&D Cooperation Network, ETRI promotes excellence in these fields at national and international level, boasting of considerable achievements, especially concerning Patent Applications & Technology Transfer and Standardization & SCI Papers³⁹.

- **Seoul Clinical Laboratories (SCL):** CyberDX focused on testing a big data-based medical artificial intelligence (AI) engine to analyse medical examination data for detecting patients' risks, as an appropriate means for prevention. It focuses on disease prevention, providing tailored analytics by comparing a patient's examination data and thousands of samples. It showed an impressive outcome in analysing how much a patient has the risk of getting Alzheimer's disease.



INDEPENDENT & CONNECTED CARE⁴⁰

- **NRF - National Research Foundation of Korea:** the NRF intends to set the direction of the nation's basic and applied research across all academic disciplines, lead changes in future-oriented research ecosystems, and become a platform and facilitator of interaction among universities, research institutes and researchers. Several Funding Programmes are under the Directorate for Basic Research in Science & Engineering of NRF, that is committed to supporting researchers in S&E to create knowledge and original technology that contribute to general society and human progress based on their creative ideas and relentless pursuit of knowledge.
 - In this framework, **Micro and Nano Transducers Lab (MINT) Group** and **Korea Advanced Institute of Science and Technology (KAIST)** coordinate to develop Highly Sensitive and Wearable Liquid Metal-Based Pressure Sensor for Health Monitoring Applications. The goal is to explore the potential of wearable soft pressure sensors for the real-time monitoring of health status and for the early diagnosis of disease.



³⁸ See at: <https://k-erc.eu/>; <http://test.scllab.co.kr/>

³⁹ See at: https://www.etri.re.kr/engcon/sub1/sub1_06.etri

⁴⁰ See at: [http://mintlab1.kaist.ac.kr/paper/\(88\).pdf](http://mintlab1.kaist.ac.kr/paper/(88).pdf); <https://k-erc.eu/>

INCLUSIVE CARE⁴¹

- Sustainability is always an issue, and the **Korean government recognized the importance of implementing long-term care insurance systems for the elderly**. It is a social insurance policy that provides movement support to elderly who cannot hold a regular living due to old age or geriatric disease, thus improving old age health and stable living, decreasing the burden of family and making quality of life higher.

Though Korea has limited domestic programmes internationally open, the Korean government has encouraged Korean researchers to be engaged in various global research initiatives and bi/multilateral programmes.

Besides excellent capacity of research and innovation society and productive research environment, indeed, Korea has a relatively good and speedy funding mechanism for those who are willing to take part in international cooperation for research and innovation.

To promote international research cooperation, Korean government initially sign a **memorandum of understanding (MoU)**, or **joint declaration**, or **agreement** with partner countries at government level, followed by preparation on **annual budget** to support Korean research beneficiaries. Therefore, the foreign counterparts should secure their own budget through their government.

Nevertheless, **National Research Foundation of Korea (NRF)** offers opportunities for internationalization for the next few years and the **Korea Institute for Advanced Technology (KIAT)** has four international research programmes currently ongoing: *International Technology R&D Collaboration Program; Global R&BD Program; Industrial Technology Cooperation Program; Official Development Assistance Program*.

KIAT | Korea Institute for Advanced Technology



Including Germany and France, [Korea Institute for Advanced Technology \(KIAT\)](#) collaborates with 14 countries to operate technology cooperative institutions and bases for overseas technology transfer and commercialization. It supports cooperative activities for technology commercialization by utilizing the Enterprise Europe Network (EEN) and the Global Commercialization Centre (GCC).

KIAT | Mission

KIAT helps enterprises enter overseas markets successfully and enter the global network. To achieve this, KIAT strengthens global cooperation including international joint R&D with foreign enterprises, universities, and research institutions.

⁴¹ See at: <http://www.longtermcare.or.kr/npbs/e/e/100/index.web>

Digital Health for AHA in USA: policy priorities and programmes

About

USA funding programmes | About

Digital therapeutics, the IoT, AI, blockchain, and other technologies are expected to play a pivotal role in creating a passive and continuous care environment that allow Americans to age in place. While there is increased interest in the elderly care market, much of digital health innovation but still focuses on the young and healthy as opposed to those who need it most.

Elderly, disabled, and vulnerable populations are often neglected in product design—creating tools that fail to truly engage with those in need. While this issue may be universal, the US can benefit from learnings from other countries who have exemplified user-centred design and product development.

While public agencies play a pivotal role in the American healthcare system, the private sector is of equal importance. For older adults, private insurers that offer medical assistance (MA) plans such as Aetna, Cigna, Kaiser Permanente, Blue Cross Blue Shield, Humana, UnitedHealthcare, and many others, provide more comprehensive health plans that facilitate ageing in place. As MA plans are paid a capitated amount per beneficiary, these insurers are incentivised to keep their patients as healthy as possible through various care delivery models and tools.

To maximise cost savings and promote health outcomes, these insurers have increasingly leveraged digital health.

UnitedHealthcare invests \$3.2 billion annually in data, technology, and innovation and is one of the leading organisations moving towards a digital health-powered healthcare system. Other health insurers also started venture funds to fuel digital health entrepreneurship. Cigna launched Cigna Ventures⁴² with \$250 million in capital to invest in early and growth stage start-ups while Kaiser Permanente Ventures invests \$170 million in capital for companies in all stages. **These insurers are critical in the health innovation space and are some of the largest proponents for digital health in chronic care management, health promotion, and AHA.**

In comparison to the various players in the healthcare system, AMCs and universities are most likely to participate in global research projects and explore international frameworks for digital health implementation.

Academic medical centres (AMCs) play a crucial role in the digital health ecosystem. AMCs power research efforts that help validate and commercialise technologies. Although AMCs traditionally focused on biomedical research, many universities have now developed centres for digital health and/or health innovation.

⁴² <https://www.cignaventures.com/>

Another noteworthy research effort is the University of California Centre for Information Technology Research in the Interested of Society (**CITRIS**), which leads several global research efforts including telehealth, as well studying whether AI can detect and prevent falls.⁴³

CITRIS partnered with global researchers from Denmark as well as several members of the EU to create the “Transatlantic Telehealth Research Network” and has published literature outlining the global research agenda for telehealth.⁴⁴

Funding Programmes and participation supporting International Cooperation in the field Digital Health for AHA



The **Department of Health and Human Services (HHS)** is the cabinet-level health department of the US Federal Government and encompasses major federal agencies such as **the Centres for Medicare and Medicaid Services (CMS)**, **the Food and Drug Administration (FDA)**, the Office of the **National Coordinator for Health Information Technology (ONC)**, the **National Institute of Health (NIH)**, and many more.

The HHS serves as the key funding agency for healthcare services and research, and has developed several programmes, initiatives, and funding opportunities to support the digital health ecosystem. These include:

- **Open Innovation**, also known as the IDEA Lab fosters innovation through challenges, hackathons, and accelerators. Since 2011, it has administered over 170 challenges and distributed \$35 million in cash prizes to over 9,000 innovators
- **Secretary’s Venture Fund**, which offers growth-stage funding and support to HHS employees with innovative ideas for how to dramatically improve the Department’s ability to carry out its mission.
- **Entrepreneurs-in-Residence Program**, where HHS recruits private-sector innovators to assist in specific challenges in the health and delivery of human services. Through this programme, the innovator gains access to the highest level of HHS leadership, a network internal and external of innovators, and a suite of tools for app development and testing.

The Department has addressed Digital Health and AHA at policy level through several recent Public Laws, such as:

1. **Health Information Technology for Economic and Clinical Health (HITECH) Act (passed under American Recovery and Reinvestment Act of 2009)**⁴⁵:

Priority/Key Areas: Implement meaningful use of interoperable EHR adoption and incentivize the adoption of health information technology⁴⁶.

Relevance: The HITECH Act was a pivotal legislation in the adoption of health information technology and electronic health records in the US. Although it is not directly applicable to

⁴³ <https://citrisc.uc.org/health/>

⁴⁴ <https://citrisc.uc.org/telehealth/project/transatlantic-telehealth-research-network/>

⁴⁵ Public Law No:111-5

⁴⁶ See: https://www.healthit.gov/sites/default/files/hitech_act_excerpt_from_arra_with_index.pdf

active and healthy aging, the act created the foundation for America's embracement of digital health and established the Office of the National Coordinator for Health Information Technology (ONC). The ONC is a key stakeholder in developing standards for health IT and advancing digital health innovation through its challenges and pilot programs.

2. Patient Protection and Affordable Care Act (ACA)⁴⁷:

Priority/Key Areas: Increase access to care, reduce costs, and improve health outcomes⁴⁸

Relevance: The ACA's triple aim is to increase access to care, reduce costs, and improve health outcomes. The landmark act began to shift America's fee for service model to one that focused on prevention and overall wellness. The act penalized avoidable readmissions and sought ways to increase access to services, which incentivized the use of connective health technologies such as telehealth that helped providers care for patients outside of the traditional setting. The ACA also created the Centre for Medicare and Medicaid Innovation, which studies innovative payment and service delivery models. While the act does not specifically address digital health, the benefits of digital health is in alignment with its triple aim and the ACA continues to be a core policy driver for health innovation.

3. Older Americans Act (OAA) Reauthorization Act⁴⁹

Priority/Key Areas: (i) Protect vulnerable elders by strengthening the Long-Term Care Ombudsman program and elder abuse screening and prevention efforts; (ii) Promote the delivery of evidence-based programs, such as falls prevention and chronic disease self-management programs⁵⁰.

Relevance: The Older Americans Act was reauthorized in 2016 with an updated focus on helping older individuals live independently in their home and communities through evidence-based interventions. Through the OAA, the Administration on Aging has developed a network with Area Agencies on Aging, State Units on Aging, and Senior Centres to support home and community-based serves (HCBS) as well as programs to support fall prevention & chronic diseases self-management education. The act also allowed the Federal government to distribute funds to states for supportive services for individuals over the age of 60.

A part of the U.S. Department of Health and Human Services, NIH – National Institute of Health is the largest biomedical research agency in the world. NIH and AARP (non-governmental) are here briefly presented as key-agencies for cooperation programmes in Digital Health for AHA.

⁴⁷ H.R.3590; Public Law No:111-149

⁴⁸ See: <https://www.hhs.gov/healthcare/about-the-aca/index.html>

⁴⁹ Ref. S.192; Public Law No: 114-144

⁵⁰ See: <https://www.congress.gov/bill/114th-congress/senate-bill/192>

NIH | NIA – National Institute of Aging



NIH's mission is to seek fundamental knowledge about the nature and behaviour of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability⁵¹. NIH is made up of 27 Institutes and Centres, each with a specific research agenda, often focusing on particular diseases or body systems. Among these, the **NIA – National Institute on Aging leads a broad scientific effort to understand the nature of aging and to extend the healthy, active years of life**. In particular, NIA is the primary Federal agency supporting and conducting Alzheimer's disease research. NIA aims can be summarized as follows:

- Understanding the interpersonal and societal factors of aging
- Creating effective interventions for age-related diseases, disorders, and disabilities
- Addressing Alzheimer's and dementia, as well as caregiver burden

NIA pursues its mission by funding extramural research at universities and medical centres across the United States and around the world; maintaining an active communications and outreach program; and conducting a vibrant intramural research program at NIA laboratories in Baltimore and Bethesda, Maryland.

Two main policy frameworks are driving R&D, as well as Health Care and assistance, currently and for the next future, in IDIH relevant fields of intervention:

1. 21st Century Cures Act⁵²

Priority/Key Areas: (i) Accelerate research into preventing and curing serious illnesses; (ii) Accelerate drug and medical device development; (iii) Address the opioid abuse crisis; (iv) Improve mental health service delivery⁵³.

Relevance: The 21st Century Cures Act is widely known to help fund efforts in precision medicine but it also aims to improve healthcare IT by addressing interoperability and information blocking. Under the act, providers and insurers may be penalized if they implement health IT in nonstandard ways or health IT that restricts the access, exchange, or use of authorized electronic health information. In addition, the act also barred the FDA from regulating mobile health apps designed to maintain and encourage a healthy lifestyle if it is not related to the diagnosis, prevention, or treatment of disease. Therefore, innovative, but low-risk technologies may be more readily available.

2. Creating High Quality Results and Outcomes Necessary to Improve Chronic (CHRONIC) Care Act (signed as part of the Bipartisan Budget Act of 2018)⁵⁴

⁵¹ For further details, see: <https://www.nih.gov/about-nih/what-we-do/mission-goals>

⁵² Ref. H.R.34; Public Law No: 114-255

⁵³ See: <https://www.congress.gov/114/plaws/publ255/PLAW-114publ255.pdf>

⁵⁴ Ref. S.870

Priority/Key Areas: (i) Promote high quality care in the home; (ii) Advance team-based care; (iii) Expand innovation and technology; (iv) Identify the chronically ill population prospectively; (v) Empower individuals and caregivers in care delivery⁵⁵

Relevance: Nearly 20mm American seniors are covered by Medicare Advantage insurance plans, which previously had very limited coverage on telehealth services and "non-medical" benefits. The CHRONIC Care Act gave MA plans more flexibility on what they can cover under "non-medical" benefits for the chronically ill and increased the availability of telehealth services especially for those who have stroke symptoms. The act also expanded the Independence at Home (IAH) demonstration, which allows seniors with multiple chronic conditions to receive care from primary care teams in their homes to reduce hospital readmissions.

AGING WELL IN THE 21ST CENTURY: STRATEGIC DIRECTIONS FOR RESEARCH ON AGING | The document, most recently updated in 2016, is NIA's "road map" for progress in aging research and outlines its goals and vision. It provides a point of reference for setting priorities and a framework for systematically analysing the Institute's scientific portfolio and assessing progress. In particular, the Goals set by this strategy are:

Understanding the Dynamics of the Aging Process

- **Goal A:** Better understand the biology of aging and its impact on the prevention, progression, and prognosis of disease and disability.
- **Goal B:** Better understand the effects of personal, interpersonal, and societal factors on aging, including the mechanisms through which these factors exert their effects.

Improving the Health, Well-Being, and Independence of Adults as They Age

- **Goal C:** Develop effective interventions to maintain health, well-being, and function and prevent or reduce the burden of age-related diseases, disorders, and disabilities.
- **Goal D:** Improve our understanding of the aging brain, Alzheimer's disease, and other neurodegenerative diseases. Develop interventions to address Alzheimer's and other age-related neurological conditions.
- **Goal E:** Improve our understanding of the consequences of an aging society to inform intervention development and policy decisions.
- **Goal F:** Understand health differences and develop strategies to improve the health status of older adults in diverse populations.

Supporting the Research Enterprise

- **Goal G:** Support the infrastructure and resources needed to promote high quality research.
- **Goal H:** Disseminate information to the public, medical and scientific communities, and policy makers about research and interventions.

⁵⁵ See: <https://www.congress.gov/bill/115th-congress/senate-bill/870>

AARP | AARP FOUNDATION



Among the major player for older Americans is the **AARP**. AARP prides itself as one of the leading organisations that recognise the potential of the “longevity economy,” which is the economic opportunity that elderly Americans present. Throughout its history, the organisation has consistently researched the 50+ consumer market and explored opportunities to engage with various sectors in an effort to improve the quality of life for older adults.

AARP | *Vision, services and funding*

AARP Foundation is a not-for-profit organization that serves vulnerable people 50 and older by creating and advancing effective solutions that help them secure the essentials.

AARP has been instrumental in reimagining the term “aging.” The organisation is dedicated to helping their members thrive and steer away from assumptions on the elderly population. In recent years, AARP has focused on assisting elders with **developing a sense of purpose, painting a positive view of aging, and addressing social engagement and social isolation issues**. The association conducts and sponsors research in various areas related to AHA and has been an advocate for leveraging social media and digital health tools. AARP has launched several initiatives to support their mission.

AARP Innovation Labs created the “**Hatchery**,” to bring together top-tier entrepreneurs to share ideas for keeping people 50 and older healthy and designing new products and services to this purpose. The Hatchery uses design challenges, pitch competitions, and other start-up accelerators to co-create products and services.⁵⁶

- Partnering with JP Morgan Asset Management, AARP provides \$40 million in capital to innovative companies. Known as the “**AARP Innovation Fund**,” the fund is focused on digital solutions for ageing at home, convenient and access to healthcare and preventative health.

AARP tackles senior poverty by sparking bold, innovative solutions that help vulnerable older adults build economic opportunity and social connectedness — fostering resilience and strengthening communities.

Bringing together industry, government, activists, and volunteers, it operates at the intersection of collaboration, innovation, legal advocacy and grant making.

In particular, AARP Foundation support enables grantees to help more people, work more efficiently, bring proven new approaches to scale, and make resources go further.

With these Request for Applications (RFAs), one for **Direct Service projects** and one for **Education, Outreach or Field-Building projects**, AARP Foundation seeks projects that advance economic opportunity among low-income older adults. Application requirements and funding levels vary based on the type of project⁵⁷.

⁵⁶ <https://www.aarp.org/about-aarp/innovation/aarp-innovation-labs/>

⁵⁷ For further details about grants: <https://www.aarp.org/aarp-foundation/grants/>



In 2019, AARP Foundation has launched new tools designed to equip low-income older adults with skills and resources to increase financial stability and connection to their communities. Among these, [Connect2Affect Connected Communities](#). This Pilot program investigates the viability of using hands-free, voice-activated technology to maintain sustained social connectedness for low-income older adults, age 50+, living in independent housing or federally subsidized rental properties. In partnership with LeadingAge Center for Aging Service Technologies, AARP Foundation studied 59 participants and found that voice-activated tech increased the participants' social interaction score and subjective social support score as well as decreased their loneliness score. The pilot study served as the foundation for the Connected Communities program, which currently seeks to expand this model to more senior living facilities.

[Appendix] - More to know about EU Funding Programmes

Useful information for applicants

Cross-cutting issues and evaluation criteria

[!] DO NOT FORGET | CROSS-CUTTING ISSUES

A number of key specific issues will be taken into account in the implementation of Horizon Europe 2021-2024 and, thus, in the evaluation of project proposals. These are transversal aspects creating a sound foundation for the pursuit of the key strategic orientations (Figure 23).

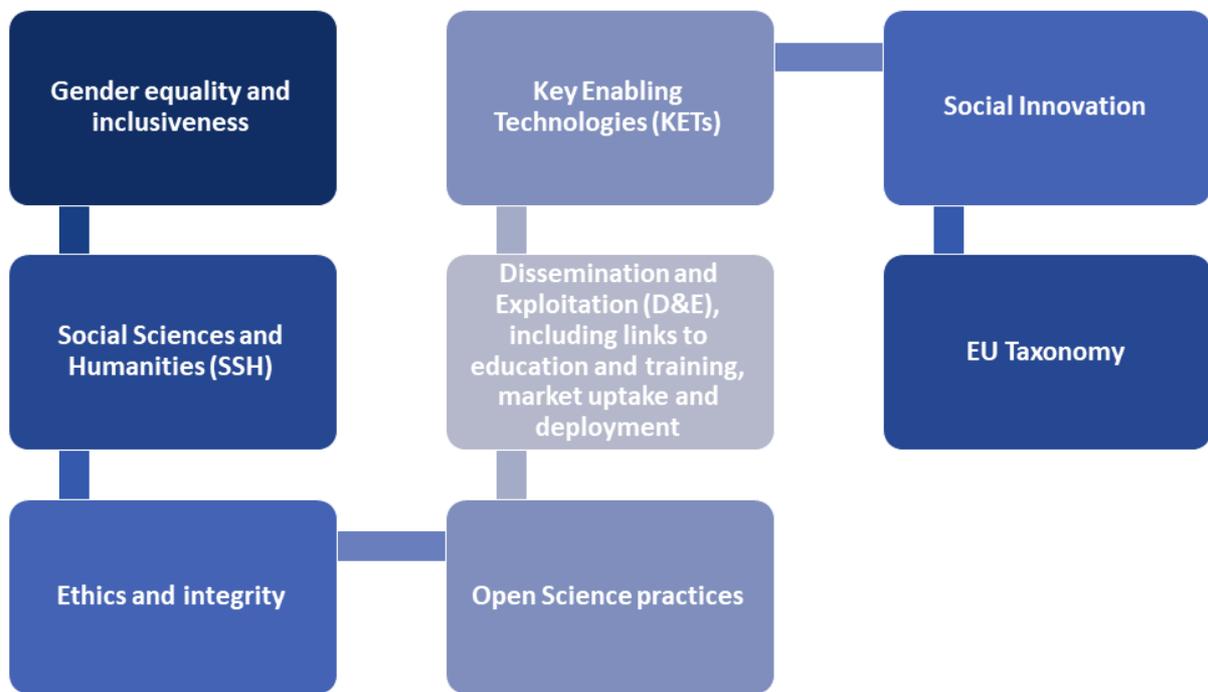


Figure 11: Transversal aspects in the Horizon Europe implementation

In particular, here some highlights:

- **Gender equality and inclusiveness:** activities should aim at eliminating gender, inequality and intersecting socio-economic inequalities throughout research and innovation systems, including by addressing unconscious bias and systemic structural barriers. The integration of the gender dimension will be, therefore, a requirement by default in research and innovation content across the whole programme.

- **EU Taxonomy:** The adoption of the EU Taxonomy Regulation in June 2020⁵⁸ creates the world's first-ever “green list” – a clear and common classification system defining which economic activities can be considered as sustainable – a common language that investors, industry and researchers can use to target projects and economic activities that have a substantial positive impact on the environment. The EU Taxonomy can also be used to ensure the ‘do no harm’ fundamental principle of public recovery investments related to the European Green Deal. More generally the EU Taxonomy should guide all investments in Europe’s recovery to ensure they are in line with our long-term ambitions.

These aspects should be considered as part of the three main evaluation criteria followed to date for the current Framework Programme.

EFP | Evaluation Criteria

When a proposal is admissible and eligible, independent experts will:

- advise the Commission if applicants have the sufficient **operational capacity** with respect to their role and tasks in the proposed action. This assessment will be based on the competence and experience of the applicants, including operational resources (human, technical and other) and, if applicable, exceptionally the concrete measures proposed to obtain it by the time of the implementation of the tasks.
- **Evaluate and score proposals** against a set of selection and award criteria⁵⁹: *Excellence, Impact, and Quality and efficiency of implementation*. In order to be considered for funding, a proposal must score above a certain threshold for each criterion, and above an overall threshold. Thresholds may vary according to the work programme.

⁵⁸ See: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

⁵⁹ These criteria are generally applied to the whole Programme, with some exceptions (e.g. MSCA, SME instrument in H2020).

Databases of EU funded projects

[!] BE INSPIRED | Check EU funded projects



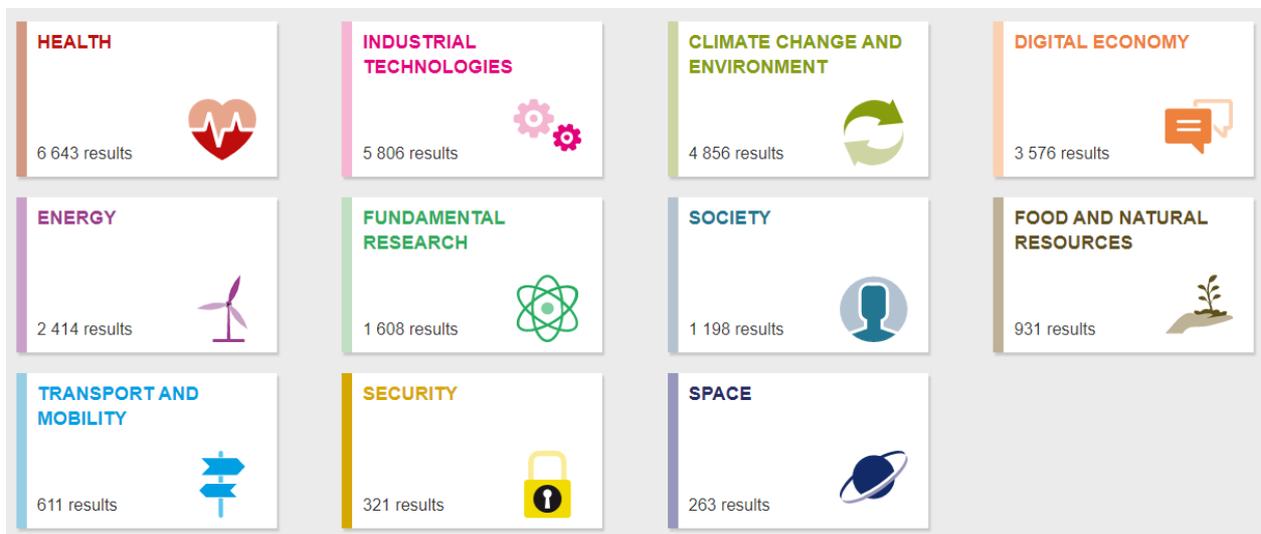
The Community Research and Development Information Service (CORDIS) is the European Commission's primary source of results from the projects funded by the EU's framework programmes for research and innovation (FP1 to Horizon 2020).

CORDIS has a rich and structured public repository with all project information held by the European Commission such as **project factsheets, participants, reports, deliverables and links to open-access publications.**

CORDIS also produces its own range of **publications and articles** to make it easier for you to find relevant results that you can use in your domain. The print editions are in English while the web versions are also available in French, German, Italian, Polish and Spanish.

CORDIS articles are classified by high-level domains that reflect where the research results could be applied, independently of their field of science. Therefore, you can browse by domain of application or filter by keywords, or by specific type of information/document sought.

- **Projects filtered by the keyword “AHA” may be explored [here](#)**
- **11 domains have been identified to collect information on R&I projects in CORDIS:**



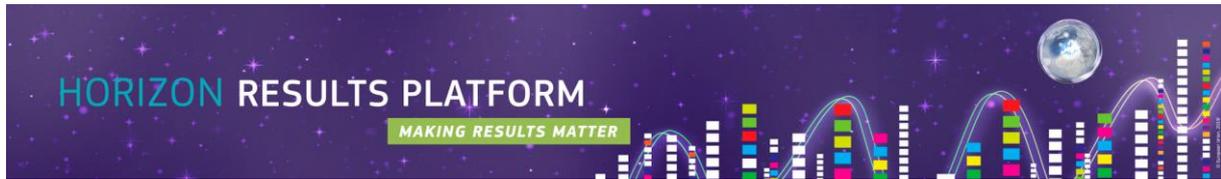
Success Stories database

The most recent *success stories* from EU-funded Research and Innovation projects all around the world are available [here](#) and can be filtered by *themes* and *countries*.

Among the relevant themes: Health & Life Science > [Health & Ageing](#), [Information Society](#), [International Cooperation](#).

The website is available in 7 EU languages besides English.

➤ [Horizon Results Platform](#)



The Horizon Results Platform is a Platform where EU Framework Programme Participants present their results for you to search, contact their owners, and hopefully form fruitful partnerships that will eventually generate the desired value.

The Horizon Dashboard is an intuitive and interactive knowledge platform offering a user-friendly public access to statistics and data on EU research and innovation:

- Easy access to overview and detailed information on proposals, funded projects and project results, notably reported IPRs and scientific publications,
- Views on specific aspects e.g. the Seal of Excellence, the European Innovation Council
- Intuitive functions for filtering and drilling down, allowing analysis by geographical location, research thematic area, organization types etc.
- Functions for data export, story-building and bookmarking – log in here to access full Dashboard functionalities

[Results with relevance to COVID-19](#) are also collected in a dedicated section.

Instructions to publish results on the Horizon Results Platform are available [here](#).

[!] Interreg Europe | Online Database of funded projects: Interreg Europe also provides a detailed database with information regarding all funded projects. The complete database can be accessed through

https://www.interregeurope.eu/search/?tx_tevsearch_search%5BentityTypes%5D%5B0%5D=project&tx_tevsearch_search%5BfilterMap%5D=project&cHash=5d4ae2fc537c19f8e2faa889c5232906.

How to search and apply for funding opportunities

The [Funding & tender Portal](#) (the Single Electronic Data Interchange Area) is the entry point for participants and experts in funding programmes and tenders managed by the European Commission and other EU bodies.

FUNDING & TENDER PORTAL | Functionalities

- Search and apply for funding opportunities in calls for proposals
- Search a call for tender and submit a tender
- Manage your grants and contracts
- Register as an expert, manage contracts and payments online.

5 steps are sufficient to participate through the Funding & Tenders Portal.

1 | Find an OPPORTUNITY

The European Commission and its funding bodies publish calls for proposals on the Funding & Tenders Portal. Therefore, you may start your search:

- by entering different **keywords**, from the home page, that characterize best your field of interest, and then refine the results with the help of further filters.
- by selecting one of the **EU funding programmes** listed on the home page, and then navigate via the quick links to the calls for proposals of a specific programme.
- Calls are divided into topics, implemented by different type of actions. Select a **topic** to read more about the identified opportunity: the topic-related documents, guidance and other instructions are available on a topic page.

How to participate in 5 steps

- 1 Find an OPPORTUNITY
- 2 Find PARTNER(s)
- 3 Create an ACCOUNT
- 4 Register your ORGANISATION
- 5 Submit your PROPOSAL or OFFER

The screenshot shows the 'Funding & Tenders Portal' home page. At the top, there's a navigation bar with 'SEARCH FUNDING & TENDERS' highlighted. Below it, a search bar is present with a dropdown menu for 'Match whole words only' and checkboxes for 'GRANTS' and 'TENDERS'. The main content area is titled 'Funding and tenders' and shows '5409 results'. It includes a 'Need help?' button and a list of funding opportunities. The first opportunity is 'CYBER ISFP-2020-AG-CYBER' with a deadline of 23 February 2021. The second is 'Innovative solution that will allow tracking all commercial freight trains...' with a deadline of 27 September 2021. The third is 'Developing and implementing local integration strategies through multi-stakeholder partnerships' with a deadline of 16 February 2021.

Figure 12: Funding & Tenders Portal (Home Page)

2 | Find PARTNERS (optional)

- Read the topic conditions to assess the partnership and other eligibility requirements of a call.
- To publish your partner search request or offer, select a topic on the Search Funding and Tenders page. Further help is available in the [IT HOW TO](#).
- Use the [Partner Search](#) site to select an organisation based on their profile or their previous participation.

3 | Create an ACCOUNT

- Each user has to have an **EU Login account** to log in on the Portal. If you already have such an account, you can use it for any interactions supported on this site from proposal submission to reporting.
- If you do not have an account yet, you need to create it by clicking on the **REGISTER** button. Otherwise you get access only to the public services of the site (eg. searching funding opportunities, reading guidance, etc.)

4 | Register your ORGANIZATION

- The Participant Register is the Commission online tool to register and manage the data of the organisations participating in the EU programmes. **It allows consistent handling of the participants` official data and avoids multiple requests to enter the same information.**
- If you want to participate in a project proposal, your organisation needs to be registered and have a 9-digit Participant Identification Code (PIC). This unique identifier of your organisation will be used as a reference by the Commission in any interactions.

5 | Submit your PROPOSAL or OFFER

- Select your topic and go to the Submission Service section of the topic page. Make sure that you select the correct type of action before you start drafting a proposal. The link to the

submission system is available, if the status of the call is 'open'. A login with your EU Login account is required.

e-SUBMISSION | Main features:

Who?

- Proposals must be created and submitted by a **representative/contact person of the coordinating organisation**. Certain types of action differ from this standard.
- While the submission of a proposal for Marie Skłodowska-Curie fellowships falls under the full responsibility of the applicant organisation represented by the main supervisor, it is technically possible for both the supervisor and the aspirant fellow to create, modify and submit the proposal.
- In proposals for Frontier Research Grants of the European Research Council the individual researcher (Principal Investigator) takes the lead on the proposal.

How?

The proposal itself consists of 2 main parts:

- **Administrative forms** (structured information of the basic administrative data, declarations of partners, organisations and contact persons, etc.)
- **Technical annex**, which is the detailed description of the planned research and innovation project outlining work packages, costs, etc.
- Further mandatory or optional annexes (e.g. supporting documents for ethics issues, detailed budget table for lump sum pilot projects) can be required by the call and the given topic, as shown in the submission system.

[!] **For the programmes managed by CHAFAEA** | CHAFAEA provides important resources on its website dedicated to the application process (templates and guide for applicants), a repository of funded projects and fact sheets as well as a list of national focal points under: https://ec.europa.eu/chafea/health/index_en.htm

Where to find assistance

Under Horizon Europe, each interested country in the world will nominate its National Contact Points (NCP) for those programmes that are considered as more nationally relevant.

NCPs - National Contact Points | who are they?

They are support structures that have become an essential component in the implementation of successive Framework Programmes. They provide **information** and on-the ground **advice** to potential applicants and beneficiaries in their own language, through the project life cycle.

A system of NCPs will be established for Horizon Europe, building on the experience of previous Framework Programmes for Research and Innovation.

As highly professional support services, NCPs operating nationally will form an essential component of Horizon Europe implementation. They will have a key role in delivering the programme's objectives and impacts ensuring that the new programme becomes known and readily accessible to all potential applicants, irrespective of sector or discipline.

The role of NCP's envisages the next core functions:

NCP role | 1. Informing, awareness raising

- **Circulate general and specific documentation** on the Horizon Europe, including on conditions for participation, on possibilities and conditions for submission of proposals, and on project budgeting and reporting.
- **Organise information and promotional activities** – in liaison with the Commission services when appropriate- e.g. info-days, seminars, conferences, newsletters, web sites, brokerage events, fairs, etc.
- **Raise awareness of:**
 - Horizon Europe funding opportunities offered through the pillars of the programmes and the specific parts such the interdisciplinary nature of Horizon Europe especially with regard to the Clusters, Missions, Partnerships, and EIT KICs, newly established activities of the European Innovation Council in Horizon Europe, especially the equity funding mechanism of the Accelerator;
 - the objectives to ensure gender balance in Horizon Europe and of strengthening the link between science and civil society;
 - the activities of the Joint Research Centre (JRC), the in-house science service of the Commission, to relevant national stakeholders from the scientific community, industry and public authorities.

NCP role | 2. Assisting, advising and training

- Assist researchers and organisations, in particular new actors and SMEs, with a view to increasing their participation in Horizon Europe.
- Assist in partner search activities notably by using internet based tools, co-operation networks, EEN partnership services for SMES, etc.
- Advise on administrative procedures, rules and issues (e.g. role and responsibilities of participants in a consortium, costs, rights and obligations of participants, ethical rules and for the principles laid down in the Commission Recommendation C(2005)576 on the European Charter for Researchers and the Code of Conduct for their Recruitment).
- Advise participants, in particular smaller organisations and SMEs, on the setting up of appropriate management and legal structures in projects with large budgets and/or numerous participants.
- Explain the scope and the modalities of funding schemes to be used in Horizon Europe.
- Organise courses and training sessions (both physical and virtual) on Horizon Europe where appropriate, for intermediaries and information multipliers to ensure high quality of advice.
- Where appropriate, organise courses and training seminars for specific target groups on specific topics (legal aspects, modalities for participation, research and innovation areas, financial rules, etc.).

NCP role | 3. Signposting and cooperation

- Signpost to other business support network services those potential participants who require assistance, for example on general EU matters or matters relating to internal market, technology transfer, intellectual property rights (IPR), standardization bodies, or regional development (see Annex III?).
- Strengthen cooperation between NCPs within the network by promoting joint activities (see Annex IV).
- Signpost to national/regional funding services and programmes and to ERA Net Projects.

Under Horizon 2020, the European Commission funded 16 projects for supporting the NCP networks, here follows the most relevant in the frame of IDIH topics (Digital Health and AHA):

Research Infrastructures | RICH-2, the European Network of National Contact Points (NCPs) for Research Infrastructures in Horizon 2020, facilitates transnational cooperation between NCPs, promotes the effective implementation of the RI programme, supports transnational and virtual access to RIs and highlights the opportunities offered by Research Infrastructures - at the European and international level. For more information visit the webpage: <http://www.rich2020.eu>



Information and Communication Technologies | Ideal-ist is an international ICT (Information and Communication Technologies) National Contact Point (NCP) network, supporting research and innovation activities for the EU Framework Programmes. The network includes more than 65 partners from Member States, Associated Countries, Eastern European Partner Countries (EEPC), Mediterranean Partner Countries (MPC), and other countries throughout the world. For more information visit the webpage: <http://www.ideal-ist.eu/>



Societal Challenge 1: Health, Demographic Change and Wellbeing | Health NCP Net 2.0 (HNN 2.0) is the European project funded by the European Commission under the Horizon2020 programme aiming at aligning and enhancing the services that NCPs for the Health, Demographic Change and Wellbeing Societal Challenge (SC1) provide to applicants of European funding for Health research across Europe and worldwide. The overall goal is to increase the quality of the proposals submitted to Health research calls in Horizon 2020 and ultimately resulting in a more efficient expenditure of the European funding for Health research. HNN 2.0 will run for four years (Jan. 2015 – Nov. 2019). For more information visit the webpage: <http://www.healthncp.net/health-ncp-net-hnn-20>



Societal Challenge 6: Europe in a changing world: inclusive, innovative and reflective societies | Net4Society is the international network of National Contact Points for the Societal Challenge 6 ("Europe in a changing world: inclusive, innovative and reflective societies") in Horizon 2020. a programme part of Horizon 2020 that is to a large extent driven by SSH research aspects. We actively support networking in the SSH research community and offer help in every respect of Horizon 2020 consultation. Net4Society includes the European and International National Contact Points of almost 50 countries. For more information visit the webpage: <http://www.net4society.eu/>



Science with and for Society | SiS Net is the international network of NCPs for Science with and for Society in Horizon 2020 focused on two main objectives a) increase dialogue and collaboration between Science with and for Society stakeholders, for example: CSO's, cities, research funding agencies, science centers, science museums, media organizations and education establishments and b) Enhance the visibility of the Science with and for Society programme. For more information visit the webpage: <http://www.sisnetwork.eu/>



[!] For Horizon Europe:

- the NCP projects will be reshaped based on the programme structure. No specific and official information about future NCP networks is available at the moment of writing this Guidebook. Accessing to the Funding and Tender Portal of the European Commission (EC), it is possible to verify who are the National Contact Points for each country under each thematic programme of Horizon 2020 and for the future Horizon Europe: <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/ncp>

[!] For Interreg Europe

- **National Points of Contact:** Interreg Europe is an interregional cooperation programme with 30 partner states – 27 EU member states, Norway, Switzerland and the United Kingdom. Each partner state has a point of contact – national/ regional representative(s) who can provide programme information in local languages and any country-specific requirements for the programme. The full list of National Points of Contact can be found here: <https://www.interregeurope.eu/contact-us/national-points-of-contact/>
- **Partner Search:** Interreg Europe provides an online partner search facility which can be accessed through: https://www.interregeurope.eu/search/?tx_tevsearch_search%5BfilterMap%5D=partners&cHash=18d725f49fee69507958a331719b482e.

Have your say!

[!] **GET INVOLVED** | European Research and Innovation Days



European Research and Innovation Days is the European Commission’s annual flagship Research and Innovation event, bringing together policymakers, researchers, entrepreneurs and the public to debate and shape the future of research and innovation in Europe and beyond.

The last edition in 2020 has been a fully virtual event, with the Policy conference and the Science is Wonderful! online exhibition, that have accompanied the European R&I community on the path towards Horizon Europe.

FIND MORE ABOUT | 2020 EU R&I Days (initiatives and outcomes)

- Policy Conference: <https://research-innovation-days.ec.europa.eu/policy-conference>
- Science is Wonderful!: https://ec.europa.eu/research/mariecurieactions/events/science-wonderful-2020_en

By creating connections between cutting-edge scientific research and the most pressing challenges of a generation, the European Research and Innovation Days represent a unique opportunity to join the conversation and enact real change.

The **European Research and Innovation Days are open to all**. The value of this event comes from building connections and encouraging fruitful exchange between diverse participants, in order to arrive at creative and impactful solutions. Interactive sessions will offer you the opportunity to provide input on how research and innovation policy and funding can help pave the way to a green, digital and resilient future.



Figure 13 European R&I Days: Thematic Hubs of the Policy Conference

There are many other opportunities to **contribute to EU law-making as it evolves** – from the preparation phase through to proposals for new laws and evaluations of how existing laws are performing. **Citizens can contribute** to public consultations and various feedback mechanisms throughout the policy cycle and consult related documents as well as contributions received.

Search open and closed consultations as well as feedback opportunities here:

- **Open/closed consultations:** <https://ec.europa.eu/info/consultations>
- **Have your say! On EU policies and existing laws:** <https://ec.europa.eu/info/law/better-regulation/have-your-say>

Projects and initiatives at international level in the field of Digital Health for AHA

Here follows an overview of initiatives in the field of Digital Health for AHA, aiming at strengthening cooperation among the EU Members States, and also between the EU and non-EU countries. These initiatives (dealing with R&I and beyond) are described in the following *fiches* that highlight the key-elements of such partnerships, their objectives and outcomes achieved, providing also references to official sources to access more info.

[!] SEE ALSO: [the part of this Appendix](#) presenting databases of funded EU projects and the EC publication [Research and Innovation in the field of ICT for Health, Wellbeing & Ageing Well: an overview](#) (September 2019).

eHealth Hub: Support for Europe's leading Health ICT SMEs



Funding Programme	EU-funded project – H2020-EU.3.1.6. - Health care provision and integrated care
Call for proposals/Topic	H2020-SC1-2016-CNECT / SC1-HCO-10-2016 - Support for Europe's leading Health ICT SMEs - H2020-SC1-2016-CNECT
Start date	1 October 2016
End date	30 September 2019
Coordinator	TICBIOMED (Spain)
Partner countries involved	Consortium partners (9) are from Spain, France, UK, The Netherlands, Italy, France, Germany. Furthermore, the initiative aims at developing partnerships with international e-health networks.
Objectives	<p>eHealth Hub is a new EU-funded initiative that is cross-border and exclusively focused on the digital health vertical. It will provide long-term support to the ecosystem stakeholders and address key challenges facing European SMEs in this space: fine-tuning a business model, securing investments, engaging the demand-side and accelerating commercialization, getting legal and regulatory guidance to develop solutions in compliance with a multi-layer complex framework.</p> <p>eHealth Hub's goal is to provide high-quality, vertically-focused and business-oriented services tailored to the needs of European eHealth SMEs and stakeholders, and to secure their continuation after the project end via a sustainable support structure.</p> <p>eHealth Hub plans to involve over 700 SMEs in its activities, developing partnerships with major European and international e-health networks, health care organizations, investors and other stakeholders, setting up a sustainable network of contacts and the market basis to generate business growth for the digital Health providers in the EU.</p>
Deliverables/Outcomes	<ul style="list-style-type: none"> ▪ Solution Match Smart Guides ▪ eHealth Roadshow Smart Guide ▪ Legal Smart Guide ▪ Business Model Smart Guide ▪ Investment Readiness & Pitch Smart Guide
Website/other useful links	<p>Available at: https://www.ehealth-hub.eu/resources/</p> <p>https://www.ehealth-hub.eu/</p> <p>https://cordis.europa.eu/project/id/727683</p>
Keywords	eHealth; SMEs



Funding Programme	EU-funded project – H2020-EU.3.1.6. - Health care provision and integrated care
Call for proposals/Topic	H2020-SC1-2018-Single-Stage-RTD / SC1-HCO-01-2018-2019-2020 - Actions in support of the International Consortium for Personalised Medicine
Start date	1 December 2018
End date	30 November 2021
Coordinator	VLAAMSE GEWEST (Belgium) - the Department Economy, Science and Innovation (EWI) of the Flemish Government
Partner countries involved	Consortium partners (3) are from Belgium, UK, Germany and the Netherlands.
Objectives	<p>To stimulate developments in personalised health and support the uptake in all European regions, including sparsely populated and remote regions, the EU recently awarded a coordination and support action on Securing the Adoption of Personalised Health in Regions - SAPHIRe.</p> <p>The project will support the agenda of the International Consortium of Personalised Medicine (ICPerMed), which was formally established in November 2016 at the initiative of the European Commission.</p> <p>The Consortium for Securing the Adoption of Personalised Health in Regions (SAPHIRe), aims to structure the application of personalised health at regional level which will drive the transition towards sustainable healthcare and personalised health.</p>
Deliverables/Outcomes	Policy documents and other relevant documents can be found at https://www.saphire-eu.eu/services .
Website/other useful links	www.saphire-eu.eu https://cordis.europa.eu/project/id/825046
Keywords	Personalised Medicine; sustainable healthcare; personalised health



Digital Health Europe



Funding Programme	EU-funded project – H2020-EU.3.1.5.2. - Improving scientific tools and methods to support policy making and regulatory needs H2020-EU.3.1.4.1. - Active ageing, independent and assisted living H2020-EU.3.1.5.1. - Improving health information and better use of health data H2020-EU.3.1.4.2. - Individual awareness and empowerment for self-management of health
Call for proposals/Topic	H2020-SC1-DTH-2018-1 / SC1-HCC-05-2018 - Support to a Digital Health and Care Innovation initiative in the context of Digital Single Market strategy
Start date	1 January 2019
End date	30 June 2021
Coordinator	EMPIRICA GESELLSCHAFT FUR KOMMUNIKATIONS UND TECHNOLOGIEFORSCHUNG MBH (Germany)
Partner countries involved	Consortium partners (16) are from Sweden, Portugal, Belgium, Ireland, France, Spain, Germany, the Netherlands and Italy.
Objectives	DigitalHealthEurope will provide comprehensive support to the Digital Health and Care Innovation initiative in the context of the Digital Single Market Strategy. The project's approach involves a number of actions that will boost innovation and advance the Digital Single Market priorities for the digital transformation of health and care (DTHC), as outlined in the European Commission's 2018 Communication on the topic. The priorities concern: <ul style="list-style-type: none"> • citizens' secure access to and sharing of health data across borders • better data to advance research, disease prevention and personalised health and care • digital tools for citizen empowerment and person-centred care.
Deliverables/Outcomes	Resources can be found on the project website: https://digitalhealtheurope.eu/resources.html
Website/other useful links	https://digitalhealtheurope.eu/ https://cordis.europa.eu/project/id/826353
Keywords	Digital health; innovation, digital single market; digital transformation



DIABFRAIL-LATAM | Scaling-up of and evidence-based intervention programme in older people with Diabetes and Frailty in Latin America



Funding Programme	EU-funded project – H2020-EU.3.1.3. - Treating and managing disease
Call for proposals/Topic	H2020-SC1-2018-Single-Stage-RTD / SC1-BHC-16-2018 - Global Alliance for Chronic Diseases (GACD) - Scaling-up of evidence-based health interventions at population level for the prevention and management of hypertension and/or diabetes
Start date	1 January 2019
End date	31 December 2022
Coordinator	CONSORCIO CENTRO DE INVESTIGACION BIOMEDICA EN RED M.P. (Spain)
Partner countries involved	Consortium partners (11) are from the United States, Italy, UK, Spain, Colombia, Chile, Mexico, Peru and Argentina
Objectives	Stemming from the results of three EU-funded projects, DIABFRAIL-LATAM intends to make a scaling up of a multimodal intervention in older people with diabetes very vulnerable because of their frailty status. The scaling up will take place in 5 Latin-American countries (1 HIC and 4 LMICs), in different settings of care.
Deliverables/Outcomes	Resources can be found on the project website: https://diabfrail-latam.eu/resources/
Website/other useful links	https://diabfrail-latam.eu/ https://cordis.europa.eu/project/id/825546
Keywords	Digital health; innovation, digital single market; digital transformation



vCARE | Virtual Coaching Activities for Rehabilitation in Elderly



Funding Programme	EU-funded project – H2020-EU.3.1.4. - Active ageing and self-management of health
Call for proposals/Topic	H2020-SC1-2017-CNECT-1 / SC1-PM-15-2017 - Personalised coaching for well-being and care of people as they age
Start date	1 September 2017
End date	31 August 2022
Coordinator	TECHNISCHE UNIVERSITAET DRESDEN (Germany)
Partner countries involved	Consortium partners (11) are from Italy, Germany, Austria, Spain, Romania, Denmark and Belgium
Objectives	<p>One out of six people in the European Union has a disability, usually caused by an acute episode or a chronic disease. A suitable rehabilitation is essential for enabling those people to live independently and enhance their Quality of Life as they age. However, the continuity of care often is interrupted in the transition from the hospital to the home. Virtual Coaches can help these patients to proceed with a personalized rehabilitation that complies to age-related conditions and as a key technology for empowering patients through the enhancement of the adherence to the care plan and the risk prevention.</p> <p>The vCare project aims to provide a smart solution grounded on an intelligent ICT environment, which is highly adapted to personalised coaching activities in accordance with the clinical pathway of the patients and the context information. Starting from a clinical baseline, the Virtual Coach will be able to personalize and adapt goals according to the progress achieved in the impairments or disabilities recovery.</p>
Deliverables/Outcomes	Project deliverables can be found under https://vcare-project.eu/project/deliverables/ , while publications can be found under https://vcare-project.eu/project/publications/ .
Website/other useful links	https://vcare-project.eu/ https://cordis.europa.eu/project/id/769807
Keywords	Rehabilitations; elderly; virtual coaching; ICT; Preventive Care



PROCare4Life | Personalized Integrated CARE Solution for Elderly facing several short or long term conditions and enabling a better quality of LIFE



Funding Programme	EU-funded project – H2020-EU.3.1.4.1. - Active ageing, independent and assisted living H2020-EU.3.1.6.2. - Optimising the efficiency and effectiveness of healthcare provision and reducing inequalities by evidence based decision making and dissemination of best practice, and innovative technologies and approaches
Call for proposals/Topic	H2020-SC1-DTH-2019 / SC1-DTH-11-2019 - Large Scale pilots of personalised & outcome based integrated care
Start date	1 January 2020
End date	31 December 2022
Coordinator	KINETIKOS-DRIVEN SOLUTIONS LDA (Portugal)
Partner countries involved	Consortium partners (13) are from Spain, the Netherlands, Germany, Italy and Romania
Objectives	Consisting of 14 partners from 6 EU Member states, PROCare4Life will improve the quality of life for older people. Co-ordinated by Kinetiko - Driven Solutions LDA in Portugal, PROCare4Life is a 3 year project and will have an impact at several levels, including local, regional, national, European and internationally. It aims to build on strong communication connections with the relevant research and innovation activities of Horizon 2020 and other EU, national and international programmes. Key stakeholders are involved in many health and care domains, and located in numerous geographic locations.
Deliverables/Outcomes	Project results can be found under https://procare4life.eu/results/ , while resources can be found under https://procare4life.eu/resources/ .
Website/other useful links	https://procare4life.eu/ https://cordis.europa.eu/project/id/875221
Keywords	Elderly; integrated care; quality of life



SHAPES | Smart and Healthy Ageing through People Engaging in Supportive Systems



Funding Programme	EU-funded project – H2020-EU.3.1.4.1. - Active ageing, independent and assisted living H2020-EU.2.1.1.3. - Future Internet: Software, hardware, Infrastructures, technologies and services
Call for proposals/Topic	H2020-SC1-FA-DTS-2018-2 / DT-TDS-01-2019 - Smart and healthy living at home
Start date	1 November 2019
End date	31 October 2023
Coordinator	NATIONAL UNIVERSITY OF IRELAND MAYNOOTH (Ireland)
Partner countries involved	Consortium partners (35) are from Ireland, Belgium, Italy, Greece, Germany, Spain, Portugal, Czech Republic, Cyprus, France, Finland, UK, Sweden, Norway
Objectives	<p>The SHAPES Innovation Action (IA) intends to build, pilot and deploy a large-scale, EU-standardised open platform. The integration of a broad range of technological, organisational, clinical, educational and societal solutions seeks to facilitate long-term healthy and active ageing and the maintenance of a high-quality standard of life. Mediated by technology, in-home and local community environments interact with health and care (H&C) networks contributing to the reduction of H&C costs, hospitalisations and institutional care.</p> <p>Leading the SHAPES consortium is the ALL Institute at Maynooth University who possess a wealth of expertise and research focused on smart and healthy ageing. The ALL Institute combines subject matter experts across Psychology, Law, Computer Science, Adult and Community Education and Electrical Engineering to target real human problems and promote greater inclusivity in our everyday lives.</p> <p>SHAPES Large-scale Piloting campaign engages more than 2000 older individuals in 15 pilot sites in 10 EU Member States, including 6 Reference Sites of the European Innovation Partnership (EIP) on Active and Healthy Ageing (AHA), and involves hundreds of key stakeholders to bring forth solutions to improve the health, wellbeing, independence and autonomy of older individuals, while enhancing the long-term sustainability of health and care systems in Europe.</p>
Deliverables/Outcomes	The deliverables and outcomes will be available on the project website
Website/other useful links	https://shapes2020.eu https://cordis.europa.eu/project/id/857159
Keywords	Open platform; health and care (H&C); technology



PlatformUptake.eu

PlatformUptake.eu 

Funding Programme	EU-funded project – H2020-EU.3.1.4.1. - Active ageing, independent and assisted living H2020-EU.3.1.5.1. - Improving health information and better use of health data
Call for proposals/Topic	H2020-SC1-DTH-2019 / SC1-HCC-02-2019 - Support for the large scale uptake of open service platforms in the Active and Healthy Ageing domain
Start date	1 January 2020
End date	28 February 2022
Coordinator	SYNYO GmbH (Austria)
Partner countries involved	Consortium partners (11) are from Italy, Germany, Greece, Slovenia, the Netherlands, Portugal, Sweden, Belgium
Objectives	Ageing is one of the biggest socioeconomic challenges of this century. In the European Union alone, 20% of the population will be over 65 by 2025. The EU-funded PlatformUptake.eu project aims to observe, analyse and understand the whole range of open service platforms and their related networks. This in turn will help generate synergies among them.
Deliverables/Outcomes	The outcomes can be found on the website
Website/other useful links	https://www.platformuptake.eu/ https://cordis.europa.eu/project/id/875452
Keywords	Open platform; ageing; EU



SHELD-ON | Indoor living space improvement: Smart Habitat for the Elderly (CA16226)



Funding Programme	Funded by COST (European Cooperation in Science and Technology), a funding agency for research and innovation networks.
Call for proposals/Topic	-
Start date	24 October 2017
End date	23 October 2021
Coordinator	Asociacion Empresarial de Investigacion Centro Tecnologico del Muebley La Madera de La Region De Murcia, Spain
Partner countries involved	Parties include EU MS/AC, COST Near Neighbour Countries, COST International Partner Countries - e.g. the US and Japan. More details can be found on https://www.cost.eu/actions/CA16226/#tabs Name:parties .
Objectives	Sheld-on is a multidisciplinary network supported by the COST Association to support the development of solutions that allow older persons to live safely, comfortably, and healthily at home through integrating design, ICT, ergonomics and health knowledge into furniture and building design. SHELD-ON aims to foster knowledge exchange and the development of a joint research agenda in terms of design and development of multifunctional indoor environments to meet the requirements of Europe's ageing population while promoting healthy and safe ageing.
Deliverables/Outcomes	Publications can be found on the website http://www.sheld-on.eu/publications/
Website/other useful links	http://www.sheld-on.eu/ https://www.cost.eu/actions/CA16226/#tabs Name:overview
Keywords	Independent and connected living; elderly; ICT



AGE Platform Europe



Funding Programme	AGE's work is financed by grants of the European Union, membership fees and donations.
Call for proposals/Topic	-
Start date	AGE Platform Europe was set up in January 2001 following a process of discussion on how to improve and strengthen cooperation between older people's organizations at EU level.
End date	-
Coordinator	-
Partner countries involved	European countries are involved
Objectives	<p>AGE Platform Europe is a European network of non-profit organisations of and for people aged 50+, which aims to voice and promote the interests of the 200 million citizens aged 50+ in the European Union (Eurostat, 2018) and to raise awareness on the issues that concern them most.</p> <p>AGE's work focuses on a wide range of policy areas that impact on older and retired people. These include issues of anti-discrimination, employment of older workers and active ageing, social protection, pension reforms, social inclusion, health, elder abuse, intergenerational solidarity, research, accessibility of public transport and of the build environment, and new technologies (ICT).</p> <p>AGE seeks to give a voice to older and retired people in the EU policy debates, through the active participation of their representative organisations at EU, national, regional and local levels, and provides a European platform for the exchange of experience and best practices. AGE furthermore informs older people on their rights as EU citizen or resident and on EU policy making processes and recent EU policy development.</p>
Deliverables/Outcomes	Outcomes can be found on AGE's webpage in the https://www.age-platform.eu/our-work section
Website/other useful links	https://www.age-platform.eu
Keywords	Platform; EU policy; seniors; active ageing; ICT



EPHA | The European Public Health Alliance



Funding Programme	The European Public Health Alliance has received funding under an operating grant from the European Union's Health Programme (2014-2020).
Call for proposals/Topic	-
Start date	The European Public Health Alliance (EPHA) organisation was established in 1993 after the ratification of the Maastricht Treaty of 1992 which for the first time gave the European Community responsibilities in health protection.
End date	-
Coordinator	-
Partner countries involved	European countries are involved - The EPHA has 89 member organisations based in 21 European countries.
Objectives	A member-led organisation made up of public health NGOs, patient groups, health professionals and disease groups, EPHA works to improve health and strengthen the voice of public health in Europe. Its mission is to bring together the public health community to provide thought leadership and facilitate change; to build public health capacity to deliver equitable solutions to European public health challenges, to improve health and reduce health inequalities. Digital Health is one of the work areas of the European Public Health Alliance. EPHA works to ensure that digital tools are inclusive and integrated into current health systems, rather than being used to replace them. EPHA advocates for a continuity of care in a cross-border Europe and for the strengthening of digital health literacy skills, in order to ensure better access to healthcare for all.
Deliverables/Outcomes	Publications related to the topic of Digital Health can be found on EPHA's website: https://epha.org/digital-health/ and publications on other topics can be found here: https://epha.org/publications/
Website/other useful links	https://epha.org/
Keywords	Public health; EU policy; policy development, digital health



ESO | European Senior Organisation



Funding Programme	-
Call for proposals/Topic	-
Start date	-
End date	-
Coordinator	-
Partner countries involved	European countries are involved
Objectives	The European Senior Organisation of the PES is a membership based civil society network, and voices the values of its member organisations to the EU. It promotes and safeguards the social, cultural and economic interests of senior citizens in Europe. Its "Inclusive Europe" pillar aims to aims to improve the image of older people and promote a more positive vision of ageing, amongst other goals.
Deliverables/Outcomes	
Website/other useful links	https://www.socialistseniors.eu/
Keywords	Seniors; active ageing; inclusive Europe



ESU | European Seniors' union



Funding Programme	-
Call for proposals/Topic	-
Start date	ESU was founded in 1995
End date	-
Coordinator	-
Partner countries involved	European countries are involved
Objectives	The European Seniors' Union (ESU) is the largest political seniors' organisation in Europe, member association of the European People's Party (EPP) and is represented in 27 states with 34 organisations and about 1.269.000 members. It promotes active ageing, including an inclusive labour market enabling older workers to remain at work for longer.
Deliverables/Outcomes	Outcomes and news can be found on the website
Website/other useful links	http://esu-epp.eu/
Keywords	Seniors; union; active ageing

ANNEX 1.

Updates on opportunities for researchers and innovators from IDIH Strategic Partner Countries under EU Funding Programmes

Horizon Europe

The European Framework Program for Research and Innovation – *Horizon Europe* for the period 2021-2027 - continues to be inspired by a general principle of *openness*, in continuity with the motto "Open to the World" that featured the former *Horizon 2020*. Horizon Europe - as it is explained in the legislative text – intends, indeed, to promote and integrate cooperation with third countries and with international organizations and initiatives, taking into account the interests of the Union, international commitments, scientific diplomacy, as well as mutual benefits and reciprocity, for example in the field of Open Science. COVID-19 pandemic has further amplified the relevance of global challenges and highlighted the interdependence between ecosystems, countries and regions, as well as the need to strengthen international cooperation in R&I. Therefore, on the other hand, the objectives of European cooperation in Science, Technology and Innovation (STI) remain to strengthen the Union's scientific excellence and international competitiveness, the ability to attract the best talents to retain them in Europe, as well as to contribute to address global challenges by projecting European values at international level.

The new international cooperation strategy on R&I, which will integrate the provisions of Horizon Europe, is included in [Communication of the EC on the Global Approach to Research and Innovation. Europe's strategy for international cooperation in a changing world.](#)



WHO CAN PARTICIPATE | Participation is open to **any legal entity, regardless of their place of work, including legal entities from third countries not associated with the Program or international organizations**, except for any different provision set out in the Work Program or in specific Calls. In the vast majority of collaborative projects, the consortium must be composed of **at least three independent legal entities established in a different Member State or Associated Country. Furthermore, at least one of the entities must be established in a Member State.**



WHO CAN BE FUNDED | **Legal entities established in a Member State or an Associated Country can be financed.** Entities based in a non-associated third country must independently bear the cost of their participation in Horizon Europe. **Entities established in non-associated low-middle income third countries and, exceptionally, in other non-associated third countries, can be financed if:**

- The third country is identified in the Work Program adopted by the European Commission; or
- The European Commission or the funding body considers that the participation of the concerned entity is essential for the implementation of the project.

Association to Horizon Europe is the closest form of cooperation with non-EU countries, which allows entities of associated countries to participate in programme actions on equal terms with entities of EU countries. Negotiations are ongoing with many more non-EU countries that have expressed interest



to become associated to Horizon Europe and further announcements will be made in the coming weeks. Currently, Iceland and Norway are the first countries associated to Horizon Europe.

Consult the Factsheet of the EC [International Cooperation in Horizon Europe](#) and the [List of Participating Countries in Horizon Europe](#).

Here below you can find a short overview of the funding schemes within Horizon Europe that currently include relevant opportunities for international partners in the field of Digital Health & AHA. The related single topics/Call for Proposals are listed in the following table, ordered per deadline for applications and keywords!



Keywords: #AGEING #AI #BIG DATA #BOTTOM-UP #CHRONIC #COVID 19 #CYBERSECURITY#DIAGNOSTICS #DIGITAL HEALTH #EDUCATION #GENETICS #HTA #INFRASTRUCTURE #INTERNATIONAL COOPERATION #MEDICAL DEVICES #MENTAL HEALTH #NEURO #NON-COMMUNICABLE #PERSONALIZED MEDICINE #PHARMA #POLICY #PUBLIC HEALTH SYSTEM #ROBOTICS

Relevant Funding Schemes

Research and innovation actions (RIA)

Activities that aim to create new knowledge and/or explore the feasibility of a new or improved technology, product, process, service or solution. They therefore include basic and applied research, development and integration of technology, testing, demonstration and validation on a small-scale prototype, in a laboratory or simulated environment.

Innovation actions (IA)

Activities aimed at plan and design new, altered or improved products, processes or services, possibly including prototyping, testing, demonstration, piloting, large-scale product validation and market replication.

Coordination and support actions (CSA)

Activities which contribute to the objectives of the program and which are not research and innovation activities in the strict sense.

MSCA Doctoral Networks

The aim is to **train PhD students with an innovative, creative and entrepreneurial spirit**, able to face current and future challenges. This scheme intends to increase the attractiveness and excellence of doctoral training in Europe by providing researchers with the right combination of scientific and transversal skills through international, interdisciplinary and intersectoral mobility. The consortium must be composed of at least three legal entities established in a different Member State or Associated Country and with at least one of the entities established in a Member State (general requirement of Horizon Europe). Furthermore, no more than 40% of the European contribution can be awarded to beneficiaries of the same country or to a single IERO or international organization.



MSCA Postdoctoral Fellowships

They aim to **improve the creative and innovative potential of researchers with a PhD and to acquire new skills through international, interdisciplinary and intersectoral mobility**. They are **open to excellent researchers of any nationality**, including researchers wishing to return to Europe, researchers displaced due to conflicts in their country and those returning to research after a period of inactivity. The project proposal must be submitted by **a single independent legal entity (the host organization)**, established in a Member State or Associated Country of Horizon Europe. The researcher must have a PhD title on the deadline date of the call and respect the mobility principle, i.e. he cannot have resided or carried out his main activity (work, study, etc.) in the country of the beneficiary organization (European Postdoctoral Fellowships), or in the third country (Global Postdoctoral Fellowships) for more than 12 months during the 36 months preceding the deadline of the call. Furthermore, on the expiry date of the call, the researcher must have achieved a **maximum of 8 years of experience** (for full-time research activities) starting from the date of obtaining the PhD degree.

European Innovation Council

The EIC provides financial support, investment opportunities and coaching to **breakthrough and disruptive innovation project**, from deep tech founders to start-ups, from entrepreneurial researchers to investors, and from corporate partners to global markets. There might be room for international partners in the **EIC Pathfinder** scheme for radically new technologies emerging from research excellence.

Click on Topic ID to access the official page of the Programme and find more details!

Topic ID Programme	Topic	Type of Action	Deadline model	Deadline	Budget/Project	Keyword
HORIZON-MSCA-2021-INCO-01-01 Horizon Europe 1 Marie Skłodowska-Curie Actions	MSCA International Cooperation 2021	CSA	Single Stage	05/10/2021	2 mil./1 Project	#BOTTOM-UP #INTERNATIONAL COOPERATION
HORIZON-EIC-2021-PATHFINDERCHALLENGES-01-02 Horizon Europe 3 European Innovation Council	Tools to measure and stimulate activity in Brain Tissue	EIC Pathfinder	Single Stage	27/10/2021	3-4 mil.	#NEURO #MEDICAL DEVICES



HORIZON-EIC-2021-PATHFINDERCHALLENGES-01-03	Emerging Technologies in Cell & Gene Therapy	EIC Pathfinder	Single Stage	27/10/2021	3-4 mil.	#GENETICS #MEDICAL DEVICES
Horizon Europe 3 European Innovation Council						
HORIZON-HLTH-2022-STAYHLTH-01-01-two-stage	Boosting mental health in Europe in times of change	RIA	Two-stage	01/02/2022	7 mil./7 Projects	#MENTAL HEALTH #EDUCATION #POLICY #COVID 19
Horizon Europe 2 Cluster 1 - Health						
HORIZON-HLTH-2022-STAYHLTH-01-04-two-stage	Trustworthy artificial intelligence (AI) tools to predict the risk of chronic non-communicable diseases and/or their progression	RIA	Two-stage	01/02/2022	6 mil./10 Projects	#AI #CHRONIC #NON-COMMUNICABLE
Horizon Europe 2 Cluster 1 - Health						
HORIZON-HLTH-2022-TOOL-12-01-two-stage	Computational models for new patient stratification strategies	RIA	Two-stage	01/02/2022	60 mil./10 Projects	#BIG DATA #PERSONALIZED MEDICINE #AI
Horizon Europe 2 Cluster 1 - Health						
HORIZON-CL2-2022-TRANSFORMATIONS-01-06	Overcoming discrimination for an inclusive labour market	RIA	Single Stage	20/04/2022	9 mil./3 Projects	#COVID 19 #MENTAL HEALTH
Horizon Europe 2 Cluster 2 - Culture, creativity and inclusive society						
HORIZON-HLTH-2022-STAYHLTH-02-01	Personalised blueprint of chronic inflammation in health-to-disease transition	RIA	Single Stage	21/04/2022	50 mil./7 Projects	#CHRONIC #DIGITAL HEALTH #PERSONALIZED MEDICINE
Horizon Europe 2 Cluster 1 - Health						
HORIZON-HLTH-2022-TOOL-11-01	Optimising effectiveness in patients of existing prescription drugs for major diseases (except cancer) with the use of biomarkers	RIA	Single Stage	21/04/2022	60 mil./6 Projects	#PHARMA #DIAGNOSTICS
Horizon Europe 2 Cluster 1 - Health						



HORIZON-HLTH-2022-TOOL-11-02 Horizon Europe 2 Cluster 1 - Health	New methods for the effective use of real-world data and/or synthetic data in regulatory decision-making and/or in health technology assessment	RIA	Single Stage	21/04/2022	35 mil./5 Projects	#AI #MEDICAL DEVICES #DIGITAL HEALTH #HTA
HORIZON-HLTH-2022-IND-13-01 Horizon Europe 2 Cluster 1 - Health	Enhancing cybersecurity of connected medical devices	RIA	Single Stage	21/04/2022	20 mil./3 Projects	#MEDICAL DEVICES #CYBERSECURITY #BIG DATA #AI
HORIZON-HLTH-2022-IND-13-02 Horizon Europe 2 Cluster 1 - Health	Scaling up multi-party computation, data anonymisation techniques, and synthetic data generation	RIA	Single Stage	21/04/2022	30 mil./4 Projects	#INFRASTRUCTURE #AI #BIG DATA
HORIZON-HLTH-2022-IND-13-04 Horizon Europe 2 Cluster 1 - Health	up a European Smart Health Innovation Hub	CSA	Single Stage	21/04/2022	2 mil./1 Project	#DIGITAL HEALTH #AGEING #INFRASTRUCTURES #AI #ROBOTICS
HORIZON-HLTH-2022-IND-13-05 Horizon Europe 2 Cluster 1 - Health	Setting up a European Electronic Health Record Exchange Format (EEHRxF) Ecosystem	CSA	Single Stage	21/04/2022	2 mil./1 Project	#DIGITAL HEALTH
HORIZON-CL3-2022-DRS-01-04 Horizon Europe 2 Cluster 3 - Civil Security for Society	Better understanding of citizens' behavioural and psychological reactions in the event of a disaster or crisis situation	RIA	Single Stage	23/11/2022	10 mil./2 Projects	#MENTAL HEALTH #COVID 19 #PUBLIC HEALTH SYSTEM

Framework Program

It is the regulation of the European Parliament and of the Council that establishes the Research and Innovation Framework Program and the rules for participation. It establishes, among the other, the structure and objectives of the program, the budget, and the forms and rules of financing. It was approved in April 2021. The official text is now published in the Official Journal of the EU and is [available here](#).

Specific Program

This is the decision of the Council establishing the specific program for the implementation of Horizon Europe. It establishes the modalities of implementation of the program and illustrates the contents of the research and innovation activities within the various themes. It was approved by the Council in May 2021 and is published in the Official Journal of the EU. [Available here](#).

Financial Regulation

It is the regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council that establishes the financial rules applicable to the general budget of the Union. It was adopted in 2018 and is [available here](#).

Strategic Plan 2021-24

It is the implementing act that defines the strategic guidelines for the Union's research and innovation investments in the period 2021-24, ensuring alignment between the general political priorities of the EU and the Work Programmes of Horizon Europe. It is a novelty introduced in Horizon Europe and focuses on pillar II of the program (chapter 2.2). The 2021-24 Strategic Plan was adopted by the Commission on 15 March 2021 and is [available here](#).

Work programs 2021-22

These are the biennial documents adopted by the Commission for the implementation of the Specific Program. They include the *Call for Proposals* divided per *topics* and establish the budget assigned to each of them. The Calls are grouped by *Destination*, which identify the expected impact to which the R&I activities must aim. The Commission adopts normally separate Work Programs for each Horizon Europe theme. European Research Council and European Innovation Council have separate work programs, adopted on an annual basis. **The relevant Work Programmes for international cooperation are collected below from the Funding & Tenders portal.**

- [European Research Council | 2021](#)
- [European Innovation Council | 2021](#)
- [Marie Skłodowska-Curie Actions v1.0 | 2021-22](#)
- [Research Infrastructures v2.0 | 2021-22](#)
- [Health v2.0 | 2021-22](#)
- [Culture, creativity and inclusive society v1.0 | 2021-22](#)
- [Civil Security for Society v1.0 | 2021-22](#)





- [Digital, Industry and Space v1.0 | 2021-22](#)
- [Climate, Energy and Mobility v1.0 | 2021-22](#)
- [Food, Bioeconomy, Natural Resources, Agriculture and Environment v1.0 | 2021-22](#)
- [Widening participation and strengthening the European Research Area v1.0 | 2021-22](#)
- [Missions v1.0 | 2021-22](#)⁶⁰

General Annexes to the 2021-22 Work Program

The General Annexes define the general conditions to be applied to the Call for Proposals and *topics* in order to assign funding. They describe the rules for participation and funding, the evaluation and award procedures, the rules for implementing the project and other legal and financial aspects. The General Annexes 2021-22 were adopted in late March 2021 and are **available [here](#)**.

Proposal template

It is the template to be used to apply with a project proposal. It differs for each type of action. It is usually divided into a *part A*, automatically generated by the IT system based on the information entered by the applicants through the proposals submission system of the Funding & Tenders portal, and in a *part B*, the descriptive section which includes the three sections corresponding to the three evaluation criteria (excellence, impact, implementation). The different proposal templates are collected [here in the Funding & Tenders portal](#). The templates for the three main type of actions are the following: [Proposal template for Research and Innovation Action \(RIA\) and for Innovation Action \(IA\)](#) and [Proposal template for Coordination and Support Action \(CSA\)](#).

Model Grant Agreement

This is the model of the Grant Agreement that defines the guidelines for establishing the rights and obligations of the beneficiaries of the funding, as well as the Commission or the funding body. It also establishes the rights and obligations of the legal entities that become beneficiaries during the implementation of the project, as well as the role and duties of the coordinator. The first version of the MGA was published by the Commission in February, the updated version is [available here](#).

Annotated Model Grant Agreement

It is an essential document to know the details on the implementation rules of the projects and allows an easier interpretation of the rules due to the numerous practical information and examples there contained. [Available here](#).

A selection of factsheets about Horizon Europe, the EU's key funding programme for research and innovation is [available here](#).

⁶⁰ The adoption of the Commission Communication on the Missions, and therefore their official launch, should take place on September 29, 2021. Stay up to date [here](#).



COST

For information on the programme, visit the dedicated section of this Guidebook: [COST](#) In opposition to many EU-funded projects, it is possible to participate in an ongoing project. Several options are described in the COST website on how you can [participate in ongoing COST Actions](#).

The next collection date for a New COST Action is 29 October 2021 at 12:00 noon (CET). Visit the page of the [Open Call](#).

EU4HEALTH

The 2021 EU4Health work programme focuses on crisis preparedness, disease prevention, stronger health systems and healthcare workforce and digital, with cancer as a cross-cutting priority. For more information on the programme, visit the dedicated section of this Guidebook: [EU4HEALTH Programme \(DG SANTE\)](#).

The first annual [\(2021\) Work Programme of EU4Health](#) will provide €312 million for crisis preparedness, disease prevention, health systems and the healthcare workforce, and digitalisation. Funded projects will cover disease *surveillance, preventing shortages of medicines, prevention, early detection, diagnosis and treatment of cancer, stronger European Reference Networks for rare diseases, testing the resilience of health systems, and preparing a European Health Data Space*, amongst others.

5 calls for proposals under the 2021 EU4Health work programme for action grants have been launched on:

- Updating the European Cancer Information System to monitor and assess cancer screening programmes
- Inter-speciality cancer training programme
- Quality and safety of radiation technology in diagnosis and treatment of cancer
- EU Network of Youth Cancer Survivors
- Substances of human origin (SoHO) - increase resilience, ensure continuity of supply and access to safe and high quality therapies, in particular in times of crisis

Applications opened on 29 July and closed on 15 September. More calls for proposals will follow. Stay up to date on the [Funding & Tenders Portal](#).

Interreg Europe

For more information on the programme, visit the dedicated section of this Guidebook: [Interreg Europe \(DG REGIO\)](#). The INTERREG EUROPE 2021-2027 Cooperation Programme is now published (September 2021) and [available here](#). The final text of the programme is available also in this [folder](#) together with the other documents relevant to the 2021-2027 programming. The programming process will end with the submission of this cooperation programme text to the European Commission for final approval. **It is expected that the new programme will come into effect in early 2022.**

Before getting the new programme approved, details will be share about it on 24 and 25 November 2021 at ['Europe, let's cooperate!'](#) online event.



ANNEX 2.

Updates on opportunities for EU researchers and innovators under the Funding Programmes of IDIH Strategic Cooperation Countries

Canada

For more information on international cooperation opportunities as part of Canadian policies and programmes, visit the dedicated section of this Guidebook: [The opportunities for International Cooperation](#)

Updates currently concern the opportunities offered by CIHR:

The Canadian Institutes of Health Research (CIHR) is Canada's federal funding agency for health research. It is composed of 13 Institutes, and collaborates with partners and researchers to support the discoveries and innovations that improve our health and strengthen our health care system. CIHR's mission is to create new scientific knowledge and to enable its translation into improved health, more effective health services and products, and a strengthened Canadian health care system. Each of these 13 Institutes is dedicated to a specific focus area, linking and supporting researchers pursuing common goals. Each Institute embraces a range of research from fundamental bio-medical and clinical research, to research on health systems, health services, the health of populations, societal and cultural dimensions of health and environmental influences on health.

The two CIHR Institutes involved in IDIH are the Institute of Aging (IA) and the Institute of Health Services and Policy Research (IHSPR), both have been actively involved in supporting research in the area of digital health solutions for older adults.

IA and IHSPR have a long history of International collaboration. Besides the work with the World Health Organization on a variety of research challenges for the UN Decade of Healthy Ageing, areas that are currently addressed internationally include **information and communication technologies to support healthy aging** (AAL- Active and Assisted Living Programme), **Demographic Change** (JPI, More Years, Better Lives,), Neurodegenerative disease (JPND), and Health Services and Systems (To-Reach).

In terms of upcoming funding opportunities at CIHR, IHSPR is aiming to launch an opportunity to [Accelerate Evidence on Health Care Delivery System Innovations that Achieve the Quadruple Aim and Improve Health Equity Catalyst Grants](#). These grants will support one-year knowledge creation and knowledge implementation projects that will focus on macro to meso-level innovations in how health care systems and services are organized, delivered, governed, held accountable, financed, and/or funded, and the impact of those innovations on one or more of the Quadruple Aim goals and health equity. The areas include:

- Integration of care (including integrated delivery systems and continuity of care)
- Primary, home and community-based care
- Long-term care (including nursing home care and care provided in retirement homes and assisted living facilities)
- The health care workforce (including funding and remuneration, training and support, scopes of practice, interdisciplinary collaboration)



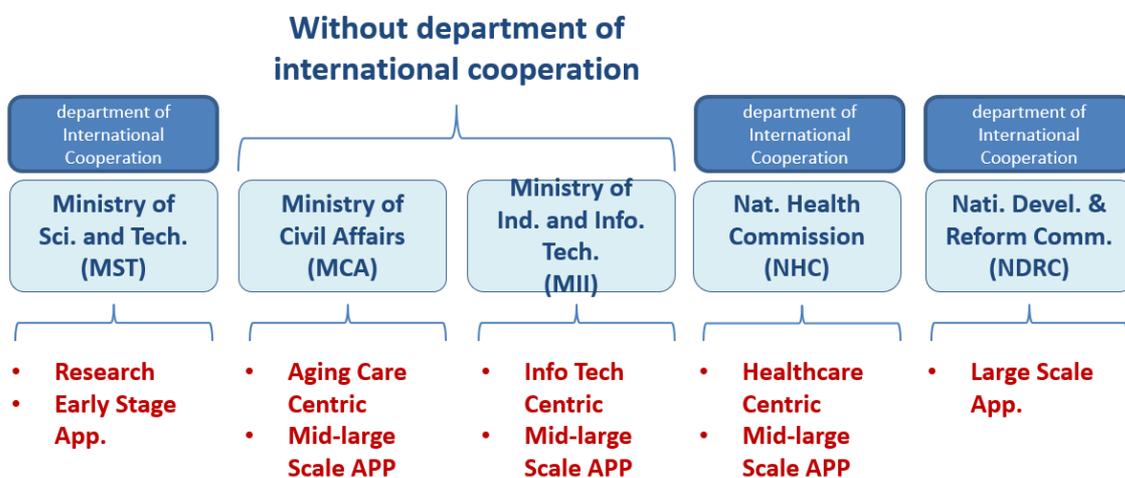
- Integrating upstream prevention within health care delivery settings to improve health, health equity and well-being, and address the social determinants of health

These are one year grants (\$100,000) for Canadians, but PI’s can partner internationally. This funding opportunity is not specific to digital health for AHA, however digital health for AHA is within scope of the Funding opportunity.

China

For more information on international cooperation opportunities as part of policies and programmes in China, visit the dedicated section of this Guidebook: [The opportunities for International Cooperation](#)

The Five Ministries currently relevant to Digital Health for AHA in China may be summarized as below, with their related topics of interest:



Some of the recent High Profile Projects administrated by the Five Ministries are:

- Mii/MCA/NHC (2017-2020): 500 Smart Health Care & Aging Care Demonstration Projects.
- NHC (2016-2019): Integrated Care Pilot Programs in 90 Cities.
- NHC (2016-2020): Popularize “Family Doctor” system to cover the whole population.
- MII (2021-2022): Action Plan to Help Elderly Cross the Digital Divide

EU cooperation with China⁶¹ | *As a research and innovation powerhouse, China is a partner for the EU in tackling global challenges. At the same time, China’s position as an economic competitor and a systemic rival to the EU calls for a rebalancing of research and innovation cooperation. The EU has launched discussions with China on a joint roadmap to establish agreed framework conditions and guiding principles for cooperation to reach a level playing field and reciprocity, while respecting fundamental values, high ethical and science integrity standards. On this basis, it will also identify the research fields in which cooperation could be mutually beneficial, such as climate science and biodiversity protection, circular economy, **health**, food, agriculture, aquaculture, and ocean*

⁶¹ Extract from Communication of the EC on the Global Approach to Research and Innovation. Europe's strategy for international cooperation in a changing world. Brussels, 18.5.2021



observation. Reaching a level playing field and reciprocity will be conditional to developing cooperation with China. The EU is funding an EU knowledge network on China to address research and innovation, bringing together Member States and the EU to discuss and share best practices and strategies and agree on common approach. At the same time, the EU should take measures to tap into China's new research and innovation potential. It should encourage universities and research institutions to ensure a higher degree of reciprocity and mutual benefit in their cooperation with Chinese counterparts.

Japan

For more information on international cooperation opportunities as part of policies and programmes in Japan, visit the dedicated section of this Guidebook: [The opportunities for International Cooperation](#)

EU and Japan are key partners in the fight against the Covid-19 outbreak. On 4 May, the EU with several partners kicked off the [Global Response pledging marathon](#) to ensure collaborative development and universal deployment of diagnostics, treatments and vaccines against coronavirus. Japan co-chaired the event and contributed by pledging over €760 million. EU's and Japan's new research and innovation programmes (Horizon Europe and Moonshot) present opportunities to enhance such cooperation, including on pandemics. To face the spreading of the coronavirus the EU is intensifying its global efforts, joining forces with partner countries to find solutions, and maximizing access to the latest scientific knowledge and international value chains. On January, JST announces [21 brainstorming teams](#) selected for investigation of ideas of new moonshot goal candidates.

The [Moonshot Research and Development Program](#) launched by the Cabinet Office (CAO) promotes high-risk, high-impact R&D aiming to achieve ambitious Moonshot Goals and solve issues facing future society such as super-aging populations and global warming.

Among the Moonshot Goals, the following are particularly relevant for Digital Health & Ageing:

- Goal 2: Ultra-early disease prediction and intervention
- Goal 3: Coevolution of AI and robots
- **Goal 7: Sustainable care system for enjoying one's life until 100 years old**



Moonshot goal 7

“Realization of sustainable care systems to overcome major diseases by 2040, for enjoying one’s life with relief and release from health concerns until 100 years old”

Moonshot goal of health & medical field

● Concept of the Moonshot goal

- ◆ To satisfy the concept and standards shown in the Visionary Meeting. [1] Inspiring (clear objective, impact) [2] Imaginative (Reform of social system) [3] Credible (Scientific feasibility)
- ◆ To be R&D responding to future practical issues of health and medical field in Japan.
- ◆ To be R&D assuming implementation for medical and nursing care, etc.
- ◆ To be R&D not only from scientific and technical viewpoints but also from ethical, legal and social viewpoints in mind.

On the premise of [1] composite of diversified innovation with impact; [2] social and industrial reform by technology produced in the process of reaching the goal of large-scale PJ; and [3] complete project management, work by collaborating fully with the goal determined at Council for Science, Technology and Innovation through Strategy Conference (tentative name), etc.

● Social issues in the background

Necessity for prevention and living positively with disease (Extension of healthy life expectancy)

- Average life expectancy will extend further
- For the extension of healthy life expectancy, it is necessary to respond to disease, function decline, etc. as a result of life-style related disease and aging

Necessity for social participation by senior citizens (short of providers)

- Ability of senior citizens of the first half of the 70s is comparable to the later half of the 00s of 14 years ago
- At present, senior citizens who want to work even after 70 years of age account for 50% of them

Regional disparity risk of medical and nursing care

- In 2035, one of five persons will be working in medical and nursing care field.
- While medical and nursing care demand will increase explosively in urban areas, medical and nursing care facilities will withdraw in provincial areas.

While fully collaborating with goal 1 to 3, focus on research with medical and nursing care to be the exit

Goal 1: Realization of a society in which human beings can be free from limitations of body, brain, space, and time by 2050. (PD: Naohiro Higata)

Goal 2: Realization of ultra-early disease prediction and intervention by 2050. (PD: Gen Shirai)

Goal 3: Realization of AI robots that autonomously learn, adapt to their environment, evaluate intelligence and act alongside human beings, by 2050. (PD: Toshiro Fukuda)

● Moonshot Goal

“Realization of sustainable care systems to overcome major diseases by 2040, for enjoying one’s life with relief and release from health concerns until 100 years old”

<p>Realization of a society where everyone can prevent diseases spontaneously in daily life</p> <ul style="list-style-type: none"> ✓ Establish infrastructure to maintain good mental and physical health by developing technologies in order to stay healthy and prevent the onset and aggravation of diseases by regulation of immune systems or sleep, etc., and to visualize individual physical and mental state in daily life and urge people to voluntarily take healthy maintenance actions most suitable for them by 2040. ✓ Develop technologies to monitor all living body trends with lower physical and mental load by 2030. 	<p>Realization of medical networks accessible for anyone from anywhere in the world</p> <ul style="list-style-type: none"> ✓ Establish a medical network to provide the same level of medical care as a normal time regardless of region and even upon disasters and emergencies by developing diagnostic and treatment devices for simple tests and treatments at home, etc. and diagnosis- and treatment-free technologies for part of chronic diseases by 2040. In addition, develop methods for radical treatment and precision medicine for diseases such as cancer and dementia by substantially reducing the development period of drugs and medical devices, etc. through establishment of data science and evaluation systems by 2040. ✓ Establish a technology platform to provide quality medical and nursing care suitable for each individual appropriately even with less providers by developing compact, speedy and high-sensitivity diagnostic and treatment devices as well as technologies to further enhance doctors' medical opinion and diagnostic capability by 2030. 	<p>Realization of drastic improvement of QoL without feeling load (realization of an inclusive society without health disparity)</p> <ul style="list-style-type: none"> ✓ Establish a social infrastructure to enable self-reliant life at home without depending on nursing care by developing such technologies as the recovery of body function with rehabilitation without feeling load, normalization of ailing biocontrol systems, regeneration or substitution of weakened organs and so forth by 2040. ✓ Develop technologies to improve body function through load-reducing rehabilitation and support self-reliant life at home and to improve ailing living biocontrol systems by 2030.
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* For attaining the goal, it is important to have various research approaches which cross over between basic research and practical research or between medical research and research of other field and the adoption of the latest knowledge.

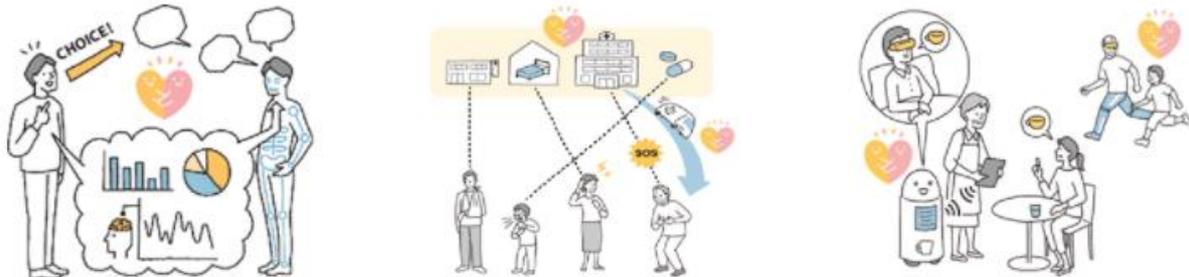


Figure 14 The Moonshot Goal engaged by AMED

Finally, a new European Union-Japan initiative was launched on 13 November 2020 to encourage **collaboration between top Japanese researchers in the medical field and Europe-based teams**, funded by the European Research Council (ERC) and with the Japan Agency for Medical Research and Development (AMED).

The Agreement was signed for the EU by Ambassador to Japan Dr Patricia Flor and for AMED by President Dr Mishima Yoshinao in the online presence of Ms Maria Cristina Russo, Director for International Cooperation DG Research and Innovation, and President ad interim of the European Research Council (ERC) Prof. Jean-Pierre Bourguignon.



The initiative enables **research visits and short- or long-term exchange**. At a time of the current pandemic, undoubtedly joining forces is the only solution facing such a tough battle for common solutions. This arrangement is the ERC's 16th of this kind, and the 3rd signed with Japan, after JSPS (2015) and JST (2018).

South Korea

For more information on international cooperation opportunities as part of policies and programmes in South Korea, visit the dedicated section of this Guidebook: [The opportunities for International Cooperation](#)

Cooperation with Korea is a priority for the EU and there is strong potential to work for mutual benefit in a wide range of areas. Among the long-standing common priority areas of intensify cooperation are

- 5G
- Internet of Things
- cloud and artificial intelligence

Cooperation under researcher mobility schemes such as [European Research Council](#) and [Marie Skłodowska-Curie Actions](#) remains a priority.

USA

For more information on international cooperation opportunities as part of policies and programmes in USA, visit the dedicated section of this Guidebook: [The opportunities for International Cooperation](#)

EU cooperation with USA⁶² | *Cooperation with the United States, with which the EU shares high levels of research and innovation capacity and common values and principles, ensures that researchers, innovators and the best facilities are combined in the search for solutions to global challenges. In particular, the recommitment of the United States to climate goals and to the strengthening of the multilateral order provides the opportunity for a renewed relationship in research and innovation. The Joint Communication '[A new EU-US agenda for global change](#)' sets out a number of proposals for cooperation with the US, and notably a call to form a Green Technology Alliance and to establish a new EU-US Trade and Technology Council. Building on this text, the Commission also proposes to increase reciprocity in bilateral cooperation, and raise the levels of coordination and coherence between EU and US research and innovation investments, beginning with **climate, digital, energy, environmental and health challenges**.*

Opportunities for EU-US cooperation are also offered by multilateral fora such as the [Global Alliance on Chronic Disease](#) to coordinate and supports research activities that address the prevention and treatment of NCDs or chronic non-communicable diseases, on a global scale. At the June 2021 EU-US Summit, during the COVID-19 pandemic, leaders underlined the commitment to **continue to engage in health research initiatives**, including to develop medical countermeasures in a much shorter period of time.

⁶² Extract from Communication of the EC on the Global Approach to Research and Innovation. Europe's strategy for international cooperation in a changing world. Brussels, 18.5.2021



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